



GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
EARTH SYSTEM SCIENCE ORGANIZATION
INDIA METEOROLOGICAL DEPARTMENT

DAILY NORMALS OF UPPER AIR WINDS

(1971-2000)

OBSERVATION TIME 1730 IST

ISSUED BY
UPPER AIR CLIMATOLOGICAL SECTION
Additional Director General of Meteorology (Research)
India Meteorological Department

Pune
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P R E F A C E

Climate has great influence on our lives as it affects agriculture, commerce, industry, aviation, transportation and so on. Climate varies on all scales of space and time. Climatological normals are a useful way to describe the average conditions of a location and also useful for comparing current climatic conditions. The climatological normals find wide applications in operational, research and educational institutes besides being used by individual users. The World Meteorological Organization (WMO) defines normals as “period averages computed for a uniform and relatively long period comprising at least three consecutive 10 year periods” whereas period averages are arithmetic averages of climatological data computed for shorter periods of at least ten years. It may be mentioned that as per the standing practice the averages for the periods less than 30 years are not regarded as giving the “normal” values but they may be treated as period averages.

The India Meteorological Department has been publishing climatological normals of important meteorological parameters from time to time since 1904. First Radiosonde / Radiowind (RS/RW) station started taking upper air observations at New Delhi in December 1943. Seven stations were recording RS/RW data up to 1950. Gradually, the demand for upper air data increased and more number of RS/RW stations were added in the network. Presently, there is a network of 39 RS/RW stations in India. There is also significant change from the point of view of technology. Prior to year 2000, the upper air data was analyzed manually, however, now it is processed through sophisticated softwares.

Upper Air Section, O/o ADGM (R), IMD, Pune has been publishing monthly normals of Upper Air winds based on morning (0000 UTC) and evening (1200 UTC) data since 1965 and updated regularly. In recent times, the demand for daily normals of upper winds has emerged. As such, the present publication on daily normals of Upper Air winds has been brought out for the data period 1971 to 2000 for 34 Indian stations for 1200 UTC. Present publication contains daily normal values of upper air resultant wind direction, resultant wind velocity, East and North components of wind for seven pressure levels (925,850,700,500,300,200 and 100 hPa).

This publication has been prepared under the overall guidance of Shri. B. Mukhopadhyay, LACD of ADGM (R). The entire work of this publication has been done by a group of officers and staff members led by Shri. I.J. Verma, Scientist-E, Upper Air Section, O/o ADGM (R), IMD, Pune. The group comprises of Shri. S.H.Bhagwat, Shri.N.D.Sabale, Shri R V Ghoge and Mrs. Sandhya Ravikiran. I appreciate the help rendered by entire team of officers and staff of Printing Section for carrying out the printing work.

It is hoped that the information generated would prove to be useful to the scientific community, operational, weather forecasters, educational institutes and many other individual users.

New Delhi
2014

(Dr. L.S. Rathore)
Director General of Meteorology

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1. Data and Methodology

Upper Air Section, O/o ADGM (R), IMD, Pune is publishing normals of Upper Air winds based on morning and evening data since 1965. The last publication in this series on 'Monthly Normals of RAWIN winds' was updated in 2010 for the period 1971 to 2000 for 34 Indian stations for 0000 UTC and 1200 UTC. The present publication on 'Daily normals of Upper Air winds' has been prepared, for the first time, for the data period 1971 to 2000 for 34 Indian stations for 1200 UTC. The present publication contains daily normal values of upper air resultant wind direction (D), mean resultant wind velocity (Vr), North component (N) and East component (E) at seven standard pressure levels (925, 850, 700, 500, 300, 200 and 100 hPa). It may be mentioned that as per the standing practice the averages for the periods less than 30 years are not regarded as normal values but may be treated as 'period averages'. As wind is a vector quantity, for calculating the normal values of wind, it is necessary to calculate the zonal (E-component) and the meridional (N-component) of the wind for each observation at particular level. These parameters have been calculated by using the following formulae;

$$N = -V \times \cos(D)$$

$$E = -V \times \sin(D)$$

$$\tan D = \frac{\sum E}{\sum N}$$

$$Vr = \frac{\sqrt{(\sum N)^2 + (\sum E)^2}}{n}$$

Where,

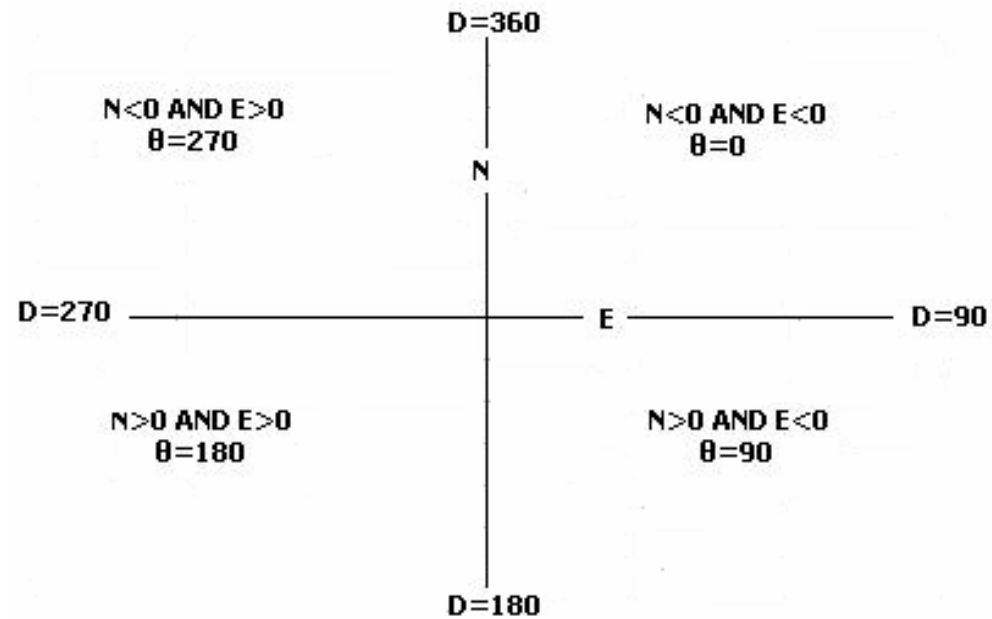
D = mean resultant wind direction in degrees

V_r = mean resultant wind velocity in mps

E = the resolved part of wind velocity in East direction (East component)

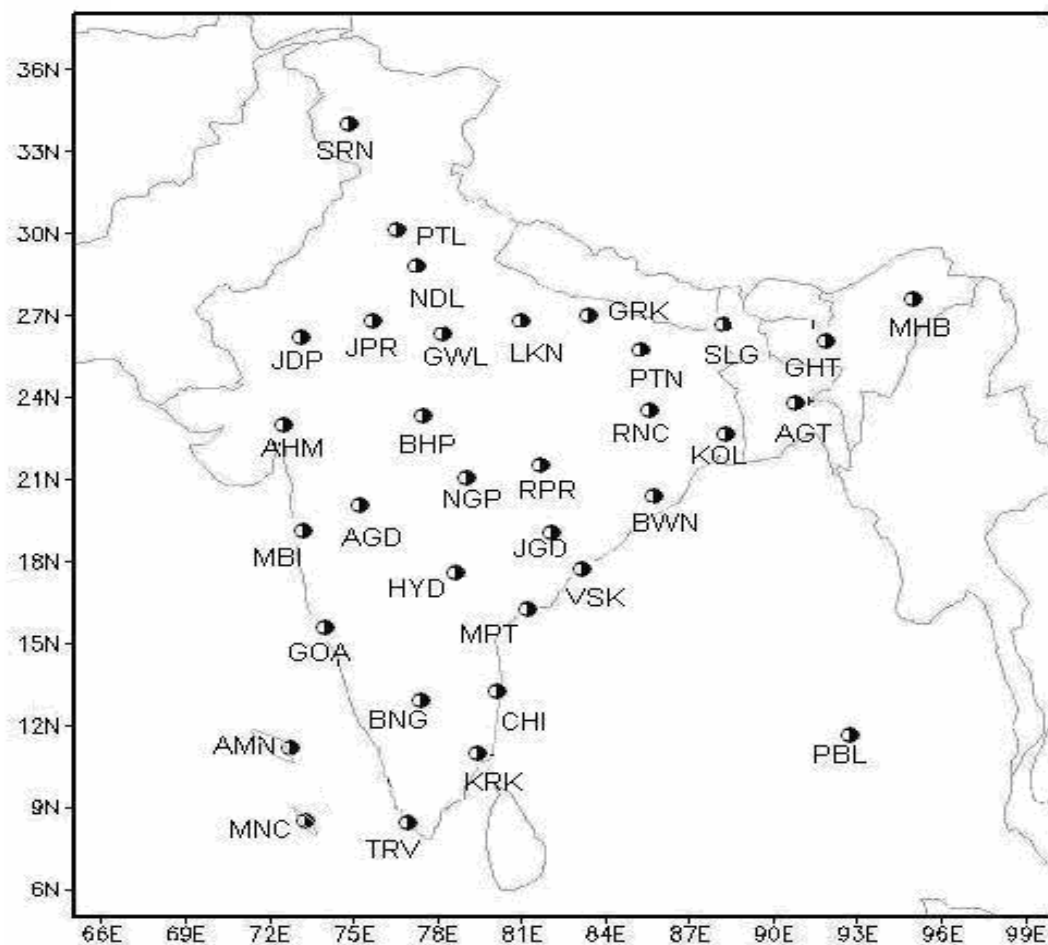
N = the resolved part of wind velocity in North direction (North component)

As $\tan(D)$ is a discontinuous function, the value of θ changes according to the quadrant table given below.



(ii)

NETWORK OF RSRW STATIONS IN INDIA



AGT	Agartala	LKN	Lucknow
AHM	Ahmedabad	MPT	Machilipatnam
AMN	Amini	MNG	Mangalore
AGD	Aurangabad	MNC	Minicoy
BNG	Bangaluru	MHB	Mohanbari
BHP	Bhopal	MBI	Mumbai
BWN	Bhubaneshwar	NGP	Nagpur
CHI	Chennai	NDL	New Delhi
Goa	Goa	PTL	Patiala
GRK	Gorakhpur	PTN	Patna
GHT	Guwahati	PBL	Port Blair
GWL	Gwalior	RPR	Raipur
HYD	Hyderabad	RNC	Ranchi
JGD	Jagdalpur	SLG	Siliguri
JDP	Jodhpur	SRN	Srinagar
KRK	Karaikal	TRV	Thiruvananthapuram
KOL	Kolkata	VSK	Vishakhapatnam

List of stations taking Upper Air observations and data availability

S.No.	Station	LAT °N (deg min)	LONG °E (deg min)	Elevation amsl(m)	Data Availability
1	Agartala	23 53	91 15	0016	1978-2000
2	Ahmedabad	23 04	72 38	0055	1971-2000
3	Amini	11 07	72 44	0004	1977-2000
4	Aurangabad	19 51	75 24	0579	1980-2000
5	Bangaluru	12 58	77 35	0921	1971-2000
6	Bhopal	23 17	77 21	0523	1982-2000
7	Bhubaneshwar	20 15	85 50	0046	1971-2000
8	Chennai	13 00	80 11	0016	1971-2000
9	Goa	15 29	73 49	0060	1971-2000
10	Gorakhpur	26 45	83 22	0077	1974-2000
11	Guwahati	26 06	91 35	0054	1971-2000
12	Gwalior	26 14	78 15	0207	1971-2000
13	Hyderabad	17 27	78 28	0545	1971-2000
14	Jagdalpur	19 05	82 02	0553	1979-2000
15	Jodhpur	26 18	73 01	0224	1971-2000
16	Karaikal	10 55	79 50	0007	1973-2000
17	Kolkata	22 39	88 27	0006	1971-2000
18	Lucknow	26 45	80 53	0128	1971-2000
19	Machilipatnam	16 12	81 09	0003	1982-2000
20	Mangalore	12 57	50 31	0031	1973-2000
21	Minicoy	08 18	73 09	0002	1971-2000
22	Mohanbari	27 29	95 01	0111	1971-2000
23	Mumbai	19 07	72 51	0014	1971-2000
24	Nagpur	21 06	79 03	0310	1971-2000
25	New Delhi	28 35	77 12	0216	1971-2000

S.No.	Station	LAT °N (deg min)	LONG °E (deg min)	Elevation amsl(m)	Data Availability
26	Patiala	30 20	76 28	0251	1974-2000
27	Patna	25 36	85 06	0060	1983-2000
28	Port Blair	11 40	92 43	0079	1971-2000
29	Raipur	21 14	81 39	0625	1979-2000
30	Ranchi	23 26	85 24	0646	1972-2000
31	Siliguri	26 40	88 22	0123	1972-2000
32	Srinagar	34 05	74 50	1587	1972-2000
33	Thiruvananthapuram	08 29	76 57	0064	1971-2000
34	Vishakhapatnam	17 43	83 14	0045	1971-2000

**Description of various terms used in the table
(Daily Normals of Upper Air winds)**

S N	Terms	Description
1	DIR	Mean resultant wind direction in degrees from true North.
2	Vo	Mean resultant wind velocity in mps.
3	E	the resolved part of wind velocity in East direction (East component) in mps
4	N	the resolved part of wind velocity in North direction (North component) in mps

C O N T E N T S			
SN	STATION	MONTH	PAGE NO.
1	Agartala	January - February	1 - 2
		March - April	3 - 4
		May - June	5 - 6
		July - August	7 - 8
		September - October	9 - 10
		November - December	11 - 12
2	Ahmedabad	January - February	13 - 14
		March - April	15 - 16
		May - June	17 - 18
		July - August	19 - 20
		September - October	21 - 22
		November - December	23 - 24
3	Amini	January - February	25 - 26
		March - April	27 - 28
		May - June	29 - 30
		July - August	31 - 32
		September - October	33 - 34
		November - December	35 - 36
4	Aurangabad	January - February	37 - 38
		March - April	39 - 40
		May - June	41 - 42
		July - August	43 - 44
		September - October	45 - 46
		November - December	47 - 48
5	Bangaluru	January - February	49 - 50
		March - April	51 - 52
		May - June	53 - 54
		July - August	55 - 56
		September - October	57 - 58
		November - December	59 - 60

C O N T E N T S			
SN	STATION	MONTH	PAGE NO.
6	Bhopal	January - February	61 - 62
		March - April	63 - 64
		May - June	65 - 66
		July - August	67 - 68
		September - October	69 - 70
		November - December	71 - 72
7	Bhubaneshwar	January - February	73 - 74
		March - April	75 - 76
		May - June	77 - 78
		July - August	79 - 80
		September - October	81 - 82
		November - December	83 - 84
8	Chennai	January - February	85 - 86
		March - April	87 - 88
		May - June	89 - 90
		July - August	91 - 92
		September - October	93 - 94
		November - December	95 - 96
9	Goa	January - February	97 - 98
		March - April	99 - 100
		May - June	101 - 102
		July - August	103 - 104
		September - October	105 - 106
		November - December	107 - 108
10	Gorakhpur	January - February	109 - 110
		March - April	111 - 112
		May - June	113 - 114
		July - August	115 - 116
		September - October	117 - 118
		November - December	119 - 120

C O N T E N T S			
SN	STATION	MONTH	PAGE NO.
11	Guwahati	January - February	121 - 122
		March - April	123 - 124
		May - June	125 - 126
		July - August	127 - 128
		September - October	129 - 130
		November - December	131 - 132
12	Gwalior	January - February	133 - 134
		March - April	135 - 136
		May - June	137 - 138
		July - August	139 - 140
		September - October	141 - 142
		November - December	143 - 144
13	Hyderabad	January - February	145 - 146
		March - April	147 - 148
		May - June	149 - 150
		July - August	151 - 152
		September - October	153 - 154
		November - December	155 - 156
14	Jagdalpur	January - February	157 - 158
		March - April	159 - 160
		May - June	161 - 162
		July - August	163 - 164
		September - October	165 - 166
		November - December	167 - 168
15	Jodhpur	January - February	169 - 170
		March - April	171 - 172
		May - June	173 - 174
		July - August	175 - 176
		September - October	177 - 178
		November - December	179 - 180

C O N T E N T S			
SN	STATION	MONTH	PAGE NO.
16	Karaikal	January - February	181 - 182
		March - April	183 - 184
		May - June	185 - 186
		July - August	187 - 188
		September - October	189 - 190
		November - December	191 - 192
17	Kolkata	January - February	193 - 194
		March - April	195 - 196
		May - June	197 - 198
		July - August	199 - 200
		September - October	201 - 202
		November - December	203 - 204
18	Lucknow	January - February	205 - 206
		March - April	207 - 208
		May - June	209 - 210
		July - August	211 - 212
		September - October	213 - 214
		November - December	215 - 216
19	Machilipatnam	January - February	217 - 218
		March - April	219 - 220
		May - June	221 - 222
		July - August	223 - 224
		September - October	225 - 226
		November - December	227 - 228
20	Mangalore	January - February	229 - 230
		March - April	231 - 232
		May - June	233 - 234
		July - August	235 - 236
		September - October	237 - 238
		November - December	239 - 240

C O N T E N T S			
SN	STATION	MONTH	PAGE NO.
21	Minicoy	January - February	241 - 242
		March - April	243 - 244
		May - June	245 - 246
		July - August	247 - 248
		September - October	249 - 250
		November - December	251 - 252
22	Mohanbari	January - February	253 - 254
		March - April	255 - 256
		May - June	257 - 258
		July - August	259 - 260
		September - October	261 - 262
		November - December	263 - 264
23	Mumbai	January - February	265 - 266
		March - April	267 - 268
		May - June	269 - 270
		July - August	271 - 272
		September - October	273 - 274
		November - December	275 - 276
24	Nagpur	January - February	277 - 278
		March - April	279 - 280
		May - June	281 - 282
		July - August	283 - 284
		September - October	285 - 286
		November - December	287 - 288
25	New Delhi	January - February	289 - 290
		March - April	291 - 292
		May - June	293 - 294
		July - August	295 - 296
		September - October	297 - 298
		November - December	299 - 300

C O N T E N T S			
SN	STATION	MONTH	PAGE NO.
26	Patiala	January - February	301 - 302
		March - April	303 - 304
		May - June	305 - 306
		July - August	307 - 308
		September - October	309 - 310
		November - December	311 - 312
27	Patna	January - February	313 - 314
		March - April	315 - 316
		May - June	317 - 318
		July - August	319 - 320
		September - October	321 - 322
		November - December	323 - 324
28	Port Blair	January - February	325 - 326
		March - April	327 - 328
		May - June	329 - 330
		July - August	331 - 332
		September - October	333 - 334
		November - December	335 - 336
29	Raipur	January - February	337 - 338
		March - April	339 - 340
		May - June	341 - 342
		July - August	343 - 344
		September - October	345 - 346
		November - December	347 - 348
30	Ranchi	January - February	349 - 350
		March - April	351 - 352
		May - June	353 - 354
		July - August	355 - 356
		September - October	357 - 358
		November - December	359 - 360

C O N T E N T S			
SN	STATION	MONTH	PAGE NO.
31	Siliguri	January - February	361 - 362
		March - April	363 - 364
		May - June	365 - 366
		July - August	367 - 368
		September - October	369 - 370
		November - December	371 - 372
32	Srinagar	January - February	373 - 374
		March - April	375 - 376
		May - June	377 - 378
		July - August	379 - 380
		September - October	381 - 382
		November - December	383 - 384

C O N T E N T S			
SN	STATION	MONTH	PAGE NO.
33	Thiruvananthapuram	January - February	385 - 386
		March - April	387 - 388
		May - June	389 - 390
		July - August	391 - 392
		September - October	393 - 394
		November - December	395 - 396
34	Vishakhapatnam	January - February	397 - 398
		March - April	399 - 400
		May - June	401 - 402
		July - August	403 - 404
		September - October	405 - 406
		November - December	407 - 408

Daily Normals of Upper Air Winds (1971-2000)

AGARTALA

JANUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	332	1.5	0.7	-1.3	255	2.3	2.2	0.6	268	11.2	11.2	0.4	262	18.8	18.6	2.5	268	26.5	26.5	1.0	257	26.0	25.4	5.7	—	—	—	—
2	339	1.9	0.7	-1.8	45	0.1	-0.1	-0.1	282	6.4	6.3	-1.3	285	18.3	17.7	-4.8	282	33.4	32.7	-6.9	304	40.0	33.1	-22.5	289	32.0	30.3	-10.4
3	270	0.9	0.9	0.0	268	2.3	2.3	0.1	274	9.5	9.5	-0.6	280	19.8	19.5	-3.4	269	31.8	31.8	0.4	260	38.0	37.4	6.6	—	—	—	—
4	310	1.6	1.2	-1.0	275	2.4	2.4	-0.2	269	8.5	8.5	0.1	267	19.9	19.9	1.1	269	34.0	34.0	0.4	263	29.5	29.3	3.7	—	—	—	—
5	333	1.1	0.5	-1.0	263	1.7	1.7	0.2	277	10.6	10.5	-1.3	285	16.4	15.9	-4.2	269	37.3	37.3	0.9	261	27.0	26.7	4.2	—	—	—	—
6	326	0.7	0.4	-0.6	286	1.8	1.7	-0.5	271	6.5	6.5	-0.1	269	18.0	18.0	0.4	272	29.5	29.5	-0.8	264	31.7	31.5	3.2	—	—	—	—
7	325	2.1	1.2	-1.7	295	2.1	1.9	-0.9	280	11.2	11.0	-1.9	272	19.6	19.6	-0.7	266	32.3	32.2	2.5	279	27.9	27.5	-4.6	262	26.0	25.7	3.6
8	313	2.1	1.5	-1.4	288	3.5	3.3	-1.1	279	9.2	9.1	-1.5	270	15.6	15.6	-0.1	264	27.3	27.1	3.0	260	27.9	27.4	5.0	260	21.0	20.7	3.6
9	340	2.3	0.8	-2.2	284	2.5	2.4	-0.6	271	9.2	9.2	-0.1	257	24.9	24.2	5.7	277	33.7	33.5	-4.1	286	52.0	50.0	-14.3	—	—	—	—
10	290	3.3	3.1	-1.1	271	4.2	4.2	-0.1	280	10.9	10.7	-1.8	268	21.7	21.7	0.7	278	33.4	33.1	-4.7	269	31.9	31.9	0.6	—	—	—	—
11	305	1.9	1.6	-1.1	284	3.3	3.2	-0.8	273	8.0	8.0	-0.4	264	16.1	16.0	1.7	257	26.8	26.1	6.2	256	25.5	24.8	6.0	220	8.0	5.1	6.1
12	242	1.9	1.7	0.9	284	3.0	2.9	-0.7	276	12.1	12.0	-1.2	270	19.8	19.8	0.1	265	33.5	33.4	3.0	262	41.4	41.0	5.4	—	—	—	—
13	309	2.2	1.7	-1.4	300	3.8	3.3	-1.9	270	9.4	9.4	0.0	266	22.8	22.7	1.6	279	30.3	30.0	-4.5	269	36.8	36.8	0.8	—	—	—	—
14	311	2.1	1.6	-1.4	283	3.6	3.5	-0.8	284	10.6	10.3	-2.6	277	20.9	20.7	-2.7	272	32.8	32.8	-1.3	264	40.0	39.8	4.2	—	—	—	—
15	344	1.8	0.5	-1.7	298	3.6	3.2	-1.7	283	11.8	11.5	-2.6	278	19.5	19.3	-2.6	276	34.9	34.7	-3.7	271	41.4	41.4	-1.0	—	—	—	—
16	227	2.6	1.9	1.8	262	3.0	3.0	0.4	269	8.3	8.3	0.1	271	19.7	19.7	-0.4	271	34.8	34.8	-0.8	279	35.9	35.4	-5.9	—	—	—	—
17	288	2.8	2.7	-0.9	302	3.6	3.1	-1.9	286	9.9	9.5	-2.8	273	23.6	23.6	-1.1	269	33.4	33.4	0.8	271	39.2	39.2	-0.4	—	—	—	—
18	290	1.5	1.4	-0.5	299	3.3	2.9	-1.6	283	8.7	8.5	-2.0	269	19.7	19.7	0.5	254	36.0	34.6	9.8	276	44.6	44.4	-4.5	—	—	—	—
19	264	2.0	2.0	0.2	268	3.4	3.4	0.1	275	10.9	10.9	-1.0	269	19.0	19.0	0.2	266	38.4	38.3	2.4	267	47.9	47.9	2.1	—	—	—	—
20	288	2.2	2.1	-0.7	270	2.8	2.8	0.0	274	10.4	10.4	-0.8	269	20.8	20.8	0.4	279	33.8	33.4	-5.0	—	—	—	—	—	—	—	—
21	255	2.3	2.2	0.6	288	2.5	2.4	-0.8	281	9.8	9.6	-1.8	273	22.4	22.4	-1.3	265	34.7	34.6	3.1	266	48.5	48.4	3.6	—	—	—	—
22	266	3.0	3.0	0.2	266	2.7	2.7	0.2	279	9.8	9.7	-1.5	273	24.1	24.1	-1.3	267	32.6	32.6	1.7	266	40.5	40.4	2.6	—	—	—	—
23	292	2.9	2.7	-1.1	300	3.2	2.8	-1.6	286	13.1	12.6	-3.5	273	25.7	25.7	-1.4	266	38.7	38.6	2.6	279	40.7	40.2	-6.2	—	—	—	—
24	265	2.3	2.3	0.2	273	4.1	4.1	-0.2	289	11.8	11.1	-3.9	276	21.6	21.5	-2.4	242	16.9	14.9	7.9	240	17.0	14.7	8.5	—	—	—	—
25	259	3.1	3.0	0.6	266	1.6	1.6	0.1	276	8.3	8.3	-0.9	275	19.8	19.7	-1.6	276	23.3	23.2	-2.5	266	27.3	27.2	1.8	291	28.0	26.1	-10.0
26	288	1.3	1.2	-0.4	263	2.5	2.5	0.3	283	9.0	8.8	-2.1	276	18.1	18.0	-1.8	267	30.9	30.8	1.8	250	37.7	35.3	13.1	235	45.0	36.9	25.8
27	302	1.9	1.6	-1.0	254	1.8	1.7	0.5	284	9.7	9.4	-2.3	275	17.1	17.0	-1.6	264	33.5	33.3	3.4	267	36.5	36.4	2.1	—	—	—	—
28	300	1.4	1.2	-0.7	257	3.2	3.1	0.7	271	9.0	9.0	-0.1	268	19.3	19.3	0.7	273	27.9	27.9	-1.6	253	34.9	33.4	10.2	—	—	—	—
29	268	2.9	2.9	0.1	281	4.6	4.5	-0.9	282	11.3	11.0	-2.4	271	22.3	22.3	-0.2	272	30.1	30.1	-1.2	269	34.9	34.9	0.8	—	—	—	—
30	289	2.1	2.0	-0.7	277	4.1	4.1	-0.5	288	11.5	11.0	-3.5	273	25.4	25.4	-1.5	261	31.7	31.4	4.7	265	32.7	32.6	2.9	—	—	—	—
31	198	0.6	0.2	0.6	254	2.6	2.5	0.7	278	10.6	10.5	-1.5	275	20.8	20.7	-1.8	273	29.1	29.1	-1.7	272	30.2	30.2	-0.9	—	—	—	—

Daily Normals of Upper Air Winds (1971-2000)

AGARTALA

MARCH

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	254	1.8	1.7	0.5	261	4.5	4.4	0.7	268	10.6	10.6	0.3	271	21.3	21.3	-0.2	258	30.3	29.6	6.3	270	36.5	36.5	0.3	239	18.0	15.4	9.3			
2	239	3.1	2.7	1.6	253	4.9	4.7	1.4	274	12.3	12.3	-0.8	273	21.4	21.4	-1.2	271	35.2	35.2	-0.7	257	38.8	37.8	8.6	252	53.0	50.4	16.4			
3	247	4.6	4.2	1.8	267	5.6	5.6	0.3	288	13.1	12.4	-4.1	278	17.8	17.6	-2.4	270	32.7	32.7	0.0	276	33.1	32.9	-3.5	—	—	—	—			
4	240	4.4	3.8	2.2	275	4.3	4.3	-0.4	287	9.5	9.1	-2.7	278	17.6	17.4	-2.3	281	34.2	33.6	-6.3	279	31.3	30.9	-4.8	290	26.0	24.4	-8.9			
5	242	6.1	5.4	2.9	274	6.0	6.0	-0.4	287	11.9	11.4	-3.5	278	17.6	17.4	-2.6	276	30.4	30.3	-3.0	268	38.0	38.0	1.5	255	19.0	18.4	4.9			
6	240	3.4	2.9	1.7	257	5.5	5.4	1.2	271	11.4	11.4	-0.1	274	20.2	20.2	-1.4	268	29.0	29.0	0.8	270	37.8	37.8	0.3	—	—	—	—			
7	270	4.1	4.1	0.0	263	5.1	5.1	0.6	273	10.3	10.3	-0.5	277	21.1	21.0	-2.4	275	35.3	35.2	-2.8	258	36.4	35.6	7.6	—	—	—	—			
8	238	4.6	3.9	2.4	250	6.3	5.9	2.1	283	11.9	11.6	-2.7	271	20.1	20.1	-0.5	271	26.1	26.1	-0.4	260	15.0	14.8	2.6	252	20.0	19.0	6.2			
9	240	3.0	2.6	1.5	265	4.2	4.2	0.4	277	10.8	10.7	-1.4	273	18.4	18.4	-1.0	270	30.6	30.6	-0.1	279	39.2	38.7	-6.4	251	28.0	26.5	9.1			
10	239	4.4	3.8	2.3	259	5.7	5.6	1.1	285	12.4	12.0	-3.2	278	19.9	19.7	-2.6	266	29.9	29.8	2.3	263	26.5	26.3	3.2	—	—	—	—			
11	227	3.8	2.8	2.6	250	5.9	5.6	2.0	283	11.1	10.8	-2.4	271	20.7	20.7	-0.5	266	32.1	32.0	2.0	262	24.6	24.3	3.6	—	—	—	—			
12	221	3.5	2.3	2.6	265	5.0	5.0	0.4	278	11.8	11.7	-1.7	266	19.5	19.5	1.2	252	27.2	25.9	8.3	264	28.8	28.7	2.9	—	—	—	—			
13	207	5.9	2.7	5.3	259	5.3	5.2	1.0	277	12.1	12.0	-1.4	269	21.4	21.4	0.4	254	29.1	28.0	7.8	252	33.4	31.8	10.3	269	23.1	23.1	0.6			
14	206	5.3	2.3	4.8	244	6.8	6.1	3.0	272	10.9	10.9	-0.4	273	15.9	15.9	-0.7	271	28.0	28.0	-0.7	283	31.9	31.1	-7.0	292	26.7	24.7	-10.2			
15	223	5.4	3.7	4.0	245	5.2	4.7	2.2	281	10.6	10.4	-2.0	275	16.5	16.4	-1.4	285	22.9	22.1	-6.0	271	28.2	28.2	-0.7	288	30.4	28.9	-9.5			
16	228	5.2	3.9	3.5	248	5.0	4.6	1.9	273	12.1	12.1	-0.7	285	20.4	19.7	-5.4	277	28.0	27.8	-3.2	269	23.4	23.4	0.5	—	—	—	—			
17	227	6.0	4.4	4.1	253	6.3	6.0	1.8	286	14.3	13.8	-3.9	279	21.2	21.0	-3.2	269	27.7	27.7	0.4	274	25.4	25.3	-1.6	248	21.0	19.5	7.9			
18	237	5.6	4.7	3.0	243	5.6	5.0	2.6	277	10.9	10.8	-1.4	276	14.9	14.8	-1.5	283	26.7	26.1	-5.8	293	31.7	29.3	-12.2	—	—	—	—			
19	212	3.8	2.0	3.2	249	5.8	5.4	2.1	276	12.7	12.6	-1.4	283	15.5	15.1	-3.5	271	23.3	23.3	-0.3	271	29.8	29.8	-0.3	284	4.0	3.9	-1.0			
20	229	5.7	4.3	3.8	241	6.6	5.8	3.2	281	12.1	11.9	-2.3	280	20.6	20.3	-3.5	264	32.7	32.5	3.2	277	34.1	33.8	-4.3	—	—	—	—			
21	220	7.0	4.5	5.3	249	7.5	7.0	2.7	280	11.7	11.5	-2.0	287	18.2	17.4	-5.4	273	25.2	25.2	-1.4	270	31.5	31.5	-0.1	—	—	—	—			
22	187	6.3	0.8	6.2	248	5.5	5.1	2.1	284	11.0	10.7	-2.6	282	17.7	17.3	-3.7	266	27.4	27.3	2.1	271	24.7	24.7	-0.6	274	8.0	8.0	-0.6			
23	194	5.5	1.3	5.3	245	6.6	6.0	2.8	274	12.1	12.1	-0.9	272	19.7	19.7	-0.8	261	24.2	23.9	3.7	271	31.9	31.9	-0.5	—	—	—	—			
24	210	6.0	3.0	5.2	245	6.8	6.1	2.9	280	11.1	10.9	-2.0	274	18.9	18.8	-1.4	264	29.4	29.2	3.0	251	34.4	32.5	11.3	—	—	—	—			
25	194	5.5	1.3	5.3	237	5.6	4.7	3.1	275	11.9	11.9	-1.0	272	17.0	17.0	-0.5	265	30.6	30.5	2.5	263	38.2	37.9	4.9	243	20.0	17.8	9.1			
26	152	2.1	-1.0	1.9	257	4.3	4.2	1.0	270	11.6	11.6	0.1	275	19.7	19.6	-1.6	278	22.6	22.4	-3.2	274	30.0	29.9	-2.0	290	20.0	18.8	-6.8			
27	234	2.4	1.9	1.4	244	4.3	3.9	1.9	271	8.1	8.1	-0.1	270	15.2	15.2	-0.1	267	26.2	26.2	1.3	260	34.9	34.4	5.8	281	23.0	22.6	-4.4			
28	205	5.0	2.1	4.5	230	4.5	3.4	2.9	279	10.0	9.9	-1.5	286	14.5	13.9	-4.1	288	21.7	20.6	-6.8	283	26.5	25.8	-5.9	261	33.6	33.2	5.0			
29	195	4.8	1.2	4.6	244	6.1	5.5	2.7	273	10.2	10.2	-0.5	275	16.0	15.9	-1.3	270	22.1	22.1	-0.1	268	27.7	27.7	1.2	285	17.0	16.4	-4.4			
30	197	5.3	1.6	5.1	243	5.1	4.6	2.3	276	11.0	10.9	-1.1	276	17.6	17.5	-1.8	284	19.2	18.6	-4.8	287	19.9	19.0	-5.8	310	14.0	10.7	-9.0			
31	207	2.5	1.1	2.2	255	4.1	4.0	1.1	266	9.7	9.7	0.7	282	16.9	16.5	-3.6	273	24.6	24.6	-1.5	278	26.9	26.6	-3.9	279	31.0	30.6	-4.8			

Daily Normals of Upper Air Winds (1971-2000)

AGARTALA

APRIL

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	177	4.1	-0.2	4.1	237	6.3	5.3	3.4	274	11.8	11.8	-0.9	275	20.6	20.5	-1.8	262	31.2	30.9	4.3	260	29.5	29.0	5.3	278	20.5	20.3	-2.9			
2	203	3.3	1.3	3.0	251	5.7	5.4	1.9	284	10.5	10.2	-2.5	273	16.5	16.5	-0.9	265	27.6	27.5	2.3	270	23.2	23.2	-0.1	274	28.8	28.7	-2.2			
3	207	3.7	1.7	3.3	236	6.5	5.4	3.7	268	9.2	9.2	0.4	265	16.3	16.2	1.3	270	28.1	28.1	0.2	264	29.0	28.8	3.0	256	35.0	34.0	8.4			
4	198	3.8	1.2	3.6	247	6.0	5.5	2.3	283	9.7	9.4	-2.2	267	15.5	15.5	0.8	253	31.2	29.8	9.3	258	38.2	37.4	7.7	257	8.0	7.8	1.8			
5	205	6.5	2.8	5.9	250	6.7	6.3	2.3	272	10.9	10.9	-0.3	270	14.6	14.6	-0.1	260	30.6	30.1	5.4	260	34.6	34.1	6.0	230	9.0	6.9	5.8			
6	194	6.1	1.5	5.9	244	5.3	4.8	2.3	280	10.9	10.7	-1.9	279	17.1	16.9	-2.6	277	34.0	33.8	-4.0	274	34.3	34.2	-2.3	—	—	—	—			
7	197	5.9	1.7	5.6	253	6.2	5.9	1.8	278	11.8	11.7	-1.6	284	16.3	15.8	-4.0	294	22.9	20.9	-9.3	283	20.7	20.2	-4.5	—	—	—	—			
8	194	7.1	1.7	6.9	238	7.2	6.1	3.8	282	12.1	11.8	-2.6	289	19.5	18.5	-6.3	285	23.7	22.9	-6.2	273	30.3	30.3	-1.7	—	—	—	—			
9	202	4.8	1.8	4.4	230	7.5	5.8	4.8	272	10.6	10.6	-0.3	274	17.0	17.0	-1.3	276	25.8	25.7	-2.6	276	29.6	29.4	-3.2	257	33.0	32.2	7.4			
10	201	4.8	1.7	4.5	231	7.0	5.4	4.4	271	12.4	12.4	-0.3	275	16.9	16.8	-1.6	273	24.1	24.1	-1.2	256	25.3	24.5	6.3	274	24.0	23.9	-1.7			
11	199	3.1	1.0	2.9	240	5.4	4.7	2.7	270	9.5	9.5	0.0	260	18.1	17.9	3.0	264	25.6	25.5	2.7	262	24.5	24.3	3.2	255	29.0	28.0	7.5			
12	208	2.7	1.3	2.4	232	4.6	3.6	2.8	279	10.1	10.0	-1.5	279	14.7	14.5	-2.2	268	22.2	22.2	0.8	271	26.7	26.7	-0.6	277	21.9	21.8	-2.5			
13	176	3.1	-0.2	3.1	212	4.7	2.5	4.0	269	9.8	9.8	0.2	279	14.6	14.4	-2.4	288	18.6	17.7	-5.6	265	22.0	21.9	2.0	272	4.6	4.6	-0.2			
14	200	4.7	1.6	4.4	227	6.3	4.6	4.3	277	9.8	9.7	-1.2	275	13.0	12.9	-1.2	278	22.7	22.5	-3.0	264	23.6	23.5	2.3	—	—	—	—			
15	227	3.7	2.7	2.5	227	5.4	4.0	3.7	263	9.4	9.3	1.1	286	12.2	11.7	-3.3	272	19.5	19.5	-0.6	269	25.9	25.9	0.5	66	6.8	-6.2	-2.8			
16	218	4.4	2.7	3.5	244	4.6	4.1	2.0	282	10.5	10.3	-2.1	269	15.8	15.8	0.4	262	26.2	25.9	3.8	263	19.6	19.5	2.4	285	18.4	17.8	-4.7			
17	193	4.5	1.0	4.4	229	5.7	4.3	3.7	267	9.7	9.7	0.5	277	14.0	13.9	-1.6	251	18.0	17.0	6.0	245	21.7	19.7	9.1	205	16.0	6.8	14.5			
18	212	5.2	2.7	4.4	241	4.7	4.1	2.3	283	8.6	8.4	-2.0	277	14.4	14.3	-1.8	278	22.2	22.0	-2.9	235	29.0	23.8	16.6	351	3.0	0.5	-3.0			
19	180	4.6	0.0	4.6	237	5.1	4.3	2.8	275	8.5	8.5	-0.8	277	13.8	13.7	-1.7	269	21.8	21.8	0.5	257	26.1	25.4	5.8	262	14.2	14.1	2.0			
20	171	6.3	-1.0	6.2	236	4.5	3.7	2.5	277	10.0	9.9	-1.3	279	14.8	14.6	-2.2	263	25.2	25.0	2.9	262	25.8	25.5	3.6	232	6.3	5.0	3.9			
21	188	9.5	1.4	9.4	235	5.5	4.5	3.1	284	9.4	9.1	-2.3	289	12.9	12.2	-4.1	266	21.9	21.9	1.4	256	30.1	29.1	7.5	283	10.3	10.0	-2.4			
22	184	4.9	0.3	4.9	224	6.5	4.5	4.7	278	9.9	9.8	-1.4	281	11.6	11.4	-2.3	265	17.2	17.1	1.6	276	22.9	22.8	-2.2	279	20.1	19.8	-3.2			
23	195	7.9	2.1	7.6	232	6.7	5.3	4.1	266	9.1	9.1	0.6	270	13.9	13.9	-0.1	257	27.1	26.4	6.0	246	29.6	27.0	12.2	—	—	—	—			
24	198	6.2	1.9	5.9	215	7.5	4.3	6.2	282	13.0	12.7	-2.6	277	14.6	14.5	-1.9	262	21.3	21.1	2.9	257	17.5	17.1	3.8	354	1.0	0.1	-1.0			
25	194	4.9	1.2	4.7	227	4.8	3.5	3.3	262	8.3	8.2	1.1	259	11.4	11.2	2.1	260	19.6	19.3	3.4	253	28.1	26.8	8.4	282	19.3	18.9	-3.9			
26	203	3.0	1.2	2.8	222	4.7	3.2	3.5	274	7.1	7.1	-0.5	270	11.7	11.7	0.1	245	21.2	19.2	8.9	249	23.0	21.5	8.3	249	18.3	17.1	6.4			
27	178	3.1	-0.1	3.1	212	6.2	3.3	5.2	265	8.1	8.1	0.7	278	11.8	11.7	-1.6	251	16.0	15.2	5.1	236	21.1	17.5	11.7	266	7.7	7.7	0.5			
28	182	3.7	0.1	3.7	221	4.6	3.0	3.5	260	7.4	7.3	1.3	274	10.6	10.6	-0.7	257	16.3	15.9	3.8	270	25.4	25.4	0.0	248	15.3	14.2	5.7			
29	185	4.4	0.4	4.4	206	5.0	2.2	4.5	261	8.7	8.6	1.4	270	12.2	12.2	-0.1	260	18.7	18.4	3.4	259	24.6	24.1	4.7	271	26.0	26.0	-0.5			
30	190	6.3	1.1	6.2	221	5.2	3.4	3.9	271	7.8	7.8	-0.1	284	11.1	10.8	-2.6	264	17.3	17.2	1.7	263	14.7	14.6	1.8	232	24.0	18.9	14.8			

Daily Normals of Upper Air Winds (1971-2000)

5

AGARTALA

MAY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	194	6.0	1.4	5.8	224	5.7	4.0	4.1	285	8.3	8.0	-2.1	278	14.0	13.9	-2.0	266	19.4	19.3	1.4	248	20.4	18.9	7.7	210	14.0	7.0	12.1			
2	191	4.3	0.8	4.2	219	5.8	3.7	4.5	281	10.1	9.9	-1.9	284	10.5	10.2	-2.5	277	15.7	15.6	-1.9	280	12.9	12.7	-2.2	265	10.6	10.6	0.9			
3	175	5.0	-0.4	5.0	222	5.0	3.3	3.7	271	9.5	9.5	-0.2	285	12.3	11.9	-3.2	256	19.1	18.5	4.6	269	16.4	16.4	0.2	288	9.3	8.8	-2.9			
4	190	6.8	1.2	6.7	217	6.0	3.6	4.8	281	8.9	8.7	-1.7	274	11.8	11.8	-0.8	269	18.5	18.5	0.4	268	16.4	16.4	0.6	304	11.7	9.7	-6.5			
5	184	5.7	0.4	5.7	221	5.2	3.4	3.9	275	7.4	7.4	-0.6	267	11.2	11.2	0.6	254	17.0	16.3	4.7	261	15.9	15.7	2.6	—	—	—	—			
6	181	5.4	0.1	5.4	217	6.1	3.7	4.9	278	8.4	8.3	-1.2	265	12.2	12.2	1.1	257	22.6	22.0	5.2	247	25.0	23.0	9.7	113	5.0	-4.6	2.0			
7	189	5.1	0.8	5.0	202	4.2	1.6	3.9	268	7.2	7.2	0.2	280	11.2	11.0	-1.9	264	20.6	20.5	2.1	265	27.6	27.5	2.2	235	17.6	14.5	10.0			
8	187	3.5	0.4	3.5	223	4.8	3.3	3.5	279	8.5	8.4	-1.3	286	10.0	9.6	-2.7	271	14.8	14.8	-0.3	271	27.9	27.9	-0.6	267	9.0	9.0	0.5			
9	208	4.1	1.9	3.6	237	4.6	3.9	2.5	277	8.2	8.1	-1.0	286	12.8	12.3	-3.6	262	17.6	17.4	2.6	259	20.1	19.7	4.0	247	12.2	11.2	4.8			
10	207	2.9	1.3	2.6	225	3.7	2.6	2.6	274	7.3	7.3	-0.5	276	10.6	10.5	-1.1	265	15.4	15.3	1.3	263	22.0	21.8	2.8	147	3.3	-1.8	2.8			
11	184	4.0	0.3	4.0	210	4.3	2.1	3.7	267	6.6	6.6	0.3	269	11.0	11.0	0.1	264	20.3	20.2	2.0	254	24.5	23.6	6.7	—	—	—	—			
12	198	1.9	0.6	1.8	228	4.7	3.5	3.2	265	7.4	7.4	0.7	279	12.6	12.4	-2.0	259	16.8	16.5	3.1	253	19.5	18.6	5.7	238	4.9	4.2	2.6			
13	169	3.8	-0.7	3.7	225	3.0	2.1	2.1	284	7.8	7.6	-1.9	276	9.1	9.1	-0.9	272	18.4	18.4	-0.8	253	16.9	16.2	4.8	58	7.0	-5.9	-3.7			
14	201	3.4	1.2	3.2	227	4.8	3.5	3.3	271	7.8	7.8	-0.1	263	11.1	11.0	1.3	262	22.8	22.6	3.2	250	14.9	14.0	5.1	268	16.8	16.8	0.5			
15	175	5.5	-0.5	5.5	195	4.8	1.2	4.6	272	7.7	7.7	-0.3	267	10.3	10.3	0.5	256	15.7	15.3	3.7	266	21.0	21.0	1.3	259	19.0	18.7	3.5			
16	175	3.7	-0.3	3.7	227	2.6	1.9	1.8	288	6.1	5.8	-1.9	274	9.0	9.0	-0.7	262	14.2	14.1	2.0	247	15.0	13.8	5.9	—	—	—	—			
17	208	4.0	1.9	3.5	227	3.8	2.8	2.6	268	6.4	6.4	0.2	259	7.3	7.2	1.4	265	12.4	12.4	1.0	271	14.6	14.6	-0.2	123	11.0	-9.2	6.0			
18	177	4.0	-0.2	4.0	203	3.6	1.4	3.3	263	3.2	3.2	0.4	262	6.5	6.4	0.9	258	14.9	14.6	3.0	244	16.6	15.0	7.2	219	9.5	6.0	7.4			
19	82	2.1	-2.1	-0.3	203	1.5	0.6	1.4	279	4.0	4.0	-0.6	273	7.2	7.2	-0.4	256	16.1	15.6	3.9	235	16.9	13.9	9.7	254	14.1	13.5	3.9			
20	176	4.6	-0.3	4.6	212	3.4	1.8	2.9	276	5.3	5.3	-0.6	268	10.0	10.0	0.3	269	11.9	11.9	0.3	254	11.7	11.3	3.2	255	2.3	2.2	0.6			
21	182	4.7	0.2	4.7	221	4.4	2.9	3.3	282	6.4	6.3	-1.3	277	6.2	6.1	-0.8	261	11.1	11.0	1.7	240	9.9	8.6	5.0	—	—	—	—			
22	185	6.2	0.5	6.2	220	3.9	2.5	3.0	286	6.6	6.3	-1.8	266	6.8	6.8	0.5	252	12.7	12.1	4.0	232	11.7	9.2	7.2	213	3.0	1.6	2.5			
23	168	8.0	-1.6	7.8	205	3.8	1.6	3.4	265	5.0	5.0	0.4	262	7.5	7.4	1.0	249	10.3	9.6	3.6	247	10.1	9.3	4.0	268	12.8	12.8	0.5			
24	192	5.8	1.2	5.7	206	5.1	2.2	4.6	270	6.2	6.2	0.0	284	6.8	6.6	-1.6	240	9.9	8.6	4.9	242	15.6	13.7	7.4	170	3.9	-0.7	3.8			
25	202	6.3	2.4	5.8	222	5.9	3.9	4.4	268	6.8	6.8	0.2	274	8.5	8.5	-0.6	243	10.7	9.6	4.8	238	12.8	10.9	6.8	—	—	—	—			
26	190	3.9	0.7	3.8	235	3.8	3.1	2.2	266	4.9	4.9	0.3	272	7.5	7.5	-0.3	249	11.9	11.1	4.2	235	13.0	10.7	7.4	227	25.0	18.3	17.0			
27	186	7.5	0.8	7.5	221	6.5	4.2	4.9	272	6.7	6.7	-0.2	278	9.3	9.2	-1.3	249	9.3	8.7	3.4	227	15.1	11.0	10.3	271	18.0	18.0	-0.3			
28	175	6.7	-0.6	6.7	193	6.9	1.6	6.7	276	8.3	8.3	-0.9	269	8.6	8.6	0.2	242	12.7	11.3	5.9	247	15.6	14.3	6.2	234	10.4	8.4	6.1			
29	187	5.5	0.7	5.5	225	6.9	4.9	4.9	275	6.9	6.9	-0.6	265	7.5	7.5	0.6	252	11.2	10.7	3.4	246	11.0	10.0	4.5	158	10.0	-3.7	9.3			
30	198	4.5	1.4	4.3	223	4.8	3.3	3.5	268	5.8	5.8	0.2	272	7.9	7.9	-0.3	244	9.5	8.5	4.2	242	12.6	11.1	5.9	196	9.5	2.6	9.1			
31	206	5.5	2.4	4.9	227	4.9	3.6	3.3	270	6.5	6.5	0.0	274	9.1	9.1	-0.7	261	10.4	10.3	1.6	256	5.4	5.2	1.3	159	2.8	-1.0	2.6			

Daily Normals of Upper Air Winds (1971-2000)

AGARTALA

JUNE

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	187	6.2	0.8	6.1	215	3.9	2.2	3.2	273	5.5	5.5	-0.3	283	5.7	5.6	-1.3	261	11.5	11.4	1.8	244	11.7	10.5	5.1	183	6.9	0.4	6.9			
2	195	7.8	2.0	7.5	206	4.1	1.8	3.7	265	3.5	3.5	0.3	276	7.5	7.5	-0.8	235	8.1	6.6	4.7	244	9.6	8.6	4.2	238	2.5	2.1	1.3			
3	180	7.0	0.0	7.0	210	3.2	1.6	2.8	281	3.8	3.7	-0.7	271	3.9	3.9	-0.1	236	9.2	7.6	5.1	223	8.7	5.9	6.4	229	2.9	2.2	1.9			
4	195	4.7	1.2	4.5	201	2.8	1.0	2.6	291	3.6	3.4	-1.3	263	5.2	5.2	0.6	235	7.1	5.8	4.1	242	4.7	4.2	2.2	221	0.9	0.6	0.7			
5	203	5.6	2.2	5.2	233	4.8	3.8	2.9	286	6.3	6.1	-1.7	278	5.8	5.7	-0.8	257	9.0	8.8	2.0	262	6.9	6.8	0.9	102	3.3	-3.2	0.7			
6	185	6.3	0.6	6.3	215	5.2	3.0	4.3	258	4.4	4.3	0.9	266	5.6	5.6	0.4	254	6.3	6.1	1.7	246	7.0	6.4	2.9	100	4.1	-4.0	0.7			
7	190	4.8	0.8	4.7	207	5.1	2.3	4.5	255	4.1	4.0	1.1	262	4.8	4.7	0.7	258	11.4	11.1	2.4	227	10.9	8.0	7.4	—	—	—	—			
8	202	6.2	2.3	5.8	206	5.0	2.2	4.5	270	4.3	4.3	0.0	257	3.5	3.4	0.8	232	5.4	4.3	3.3	232	5.6	4.4	3.4	90	6.3	-6.3	0.0			
9	198	3.8	1.2	3.6	196	5.0	1.4	4.8	244	2.8	2.5	1.2	237	2.7	2.3	1.5	220	8.0	5.2	6.1	238	9.7	8.3	5.1	52	5.0	-3.9	-3.1			
10	191	5.1	1.0	5.0	207	5.1	2.3	4.5	241	3.9	3.4	1.9	240	3.2	2.8	1.6	231	1.9	1.5	1.2	261	4.0	4.0	0.6	118	3.2	-2.8	1.5			
11	178	5.1	-0.2	5.1	201	3.6	1.3	3.4	262	3.4	3.4	0.5	213	4.0	2.2	3.4	215	1.6	0.9	1.3	269	5.1	5.1	0.1	17	5.0	-1.5	-4.8			
12	182	5.8	0.2	5.8	200	4.1	1.4	3.9	223	2.5	1.7	1.8	228	2.7	2.0	1.8	257	2.8	2.7	0.6	253	3.8	3.6	1.1	227	5.0	3.7	3.4			
13	190	5.1	0.9	5.0	195	5.4	1.4	5.2	217	2.1	1.3	1.7	219	2.2	1.4	1.7	253	1.0	1.0	0.3	183	1.8	0.1	1.8	62	8.7	-7.7	-4.1			
14	198	4.8	1.5	4.6	196	4.6	1.3	4.4	222	2.7	1.8	2.0	186	2.9	0.3	2.9	143	2.0	-1.2	1.6	196	3.2	0.9	3.1	20	7.9	-2.7	-7.4			
15	181	5.6	0.1	5.6	190	5.4	0.9	5.3	205	3.5	1.5	3.2	159	1.7	-0.6	1.6	59	1.2	-1.0	-0.6	75	2.8	-2.7	-0.7	178	3.0	-0.1	3.0			
16	181	5.8	0.1	5.8	179	5.2	-0.1	5.2	209	3.9	1.9	3.4	180	3.5	0.0	3.5	63	2.2	-2.0	-1.0	109	3.1	-2.9	1.0	10	11.5	-1.9	-11.3			
17	167	6.2	-1.4	6.0	184	7.6	0.5	7.6	190	5.4	0.9	5.3	168	3.0	-0.6	2.9	149	7.2	-3.7	6.2	134	4.9	-3.5	3.4	84	8.9	-8.8	-1.0			
18	194	7.2	1.8	7.0	199	4.9	1.6	4.6	211	3.7	1.9	3.2	182	5.1	0.2	5.1	145	4.5	-2.6	3.7	186	5.3	0.6	5.3	75	7.2	-6.9	-1.9			
19	183	6.1	0.3	6.1	186	4.0	0.4	4.0	185	3.3	0.3	3.3	190	4.1	0.7	4.0	180	3.3	0.0	3.3	137	4.5	-3.1	3.3	71	7.9	-7.5	-2.6			
20	168	7.7	-1.6	7.5	181	8.1	0.2	8.1	188	5.5	0.8	5.4	159	3.6	-1.3	3.4	193	3.7	0.8	3.6	162	5.5	-1.7	5.2	89	12.5	-12.5	-0.2			
21	183	8.2	0.5	8.2	192	7.6	1.6	7.4	191	4.8	0.9	4.7	155	5.1	-2.1	4.6	160	2.9	-1.0	2.7	95	3.2	-3.2	0.3	—	—	—	—			
22	167	8.7	-1.9	8.5	184	7.0	0.5	7.0	176	4.9	-0.3	4.9	147	5.0	-2.7	4.2	122	5.4	-4.6	2.9	91	5.1	-5.1	0.1	60	13.8	-12.0	-6.8			
23	190	7.0	1.2	6.9	181	6.4	0.1	6.4	170	5.2	-0.9	5.1	160	4.4	-1.5	4.1	158	5.5	-2.1	5.1	88	6.7	-6.7	-0.2	85	10.5	-10.5	-1.0			
24	192	8.7	1.8	8.5	194	7.2	1.8	7.0	190	4.8	0.8	4.7	174	4.4	-0.5	4.4	104	4.6	-4.5	1.1	79	12.7	-12.5	-2.4	73	17.0	-16.3	-5.0			
25	172	7.6	-1.1	7.5	196	6.4	1.8	6.1	202	4.2	1.6	3.9	135	2.3	-1.6	1.6	95	6.9	-6.9	0.6	91	7.0	-7.0	0.1	61	11.0	-9.6	-5.3			
26	178	6.5	-0.2	6.5	182	7.5	0.2	7.5	167	5.0	-1.1	4.9	169	4.1	-0.8	4.0	98	6.0	-5.9	0.8	77	9.1	-8.9	-2.0	72	19.6	-18.6	-6.2			
27	171	7.7	-1.2	7.6	176	8.0	-0.5	8.0	165	6.3	-1.6	6.1	142	4.3	-2.7	3.4	94	5.4	-5.4	0.4	74	9.0	-8.6	-2.5	80	17.7	-17.4	-3.0			
28	181	8.5	0.1	8.5	179	7.9	-0.2	7.9	177	5.7	-0.3	5.7	163	2.7	-0.8	2.6	90	6.0	-6.0	0.0	79	10.3	-10.1	-1.9	80	12.3	-12.1	-2.2			
29	182	6.9	0.2	6.9	186	8.2	0.9	8.2	193	5.9	1.3	5.8	195	2.3	0.6	2.2	110	5.1	-4.8	1.7	67	10.8	-9.9	-4.3	85	16.5	-16.4	-1.4			
30	187	6.0	0.7	6.0	201	6.5	2.3	6.1	185	4.7	0.4	4.7	107	1.4	-1.3	0.4	124	4.1	-3.4	2.3	94	3.0	-3.0	0.2	45	19.0	-13.4	-13.4			

Daily Normals of Upper Air Winds (1971-2000)

AGARTALA

JULY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	190	7.4	1.3	7.3	201	6.1	2.2	5.7	213	4.4	2.4	3.7	190	2.7	0.5	2.7	139	4.0	-2.6	3.0	75	5.8	-5.6	-1.5	89	14.4	-14.4	-0.3			
2	183	6.4	0.3	6.4	203	7.1	2.8	6.5	237	4.3	3.6	2.3	186	1.9	0.2	1.9	124	7.3	-6.1	4.1	110	7.2	-6.7	2.5	99	9.4	-9.3	1.5			
3	179	7.4	-0.1	7.4	202	8.1	3.1	7.5	231	5.3	4.1	3.3	180	2.6	0.0	2.6	131	4.1	-3.1	2.7	75	8.6	-8.3	-2.3	95	21.7	-21.6	1.9			
4	195	7.6	2.0	7.3	211	6.3	3.3	5.4	251	5.7	5.4	1.9	248	3.7	3.4	1.4	127	4.3	-3.4	2.6	70	7.9	-7.4	-2.7	76	15.6	-15.1	-3.8			
5	186	6.2	0.7	6.2	205	5.3	2.2	4.8	224	4.6	3.2	3.3	200	4.8	1.6	4.5	102	5.1	-5.0	1.1	78	9.5	-9.3	-1.9	89	21.8	-21.8	-0.3			
6	185	6.8	0.6	6.8	197	6.4	1.9	6.1	188	4.9	0.7	4.8	155	3.1	-1.3	2.8	114	5.7	-5.2	2.3	92	6.4	-6.4	0.2	80	13.6	-13.4	-2.3			
7	181	7.6	0.1	7.6	194	8.3	2.0	8.1	202	4.6	1.7	4.3	162	4.7	-1.5	4.5	105	7.7	-7.4	2.0	69	9.7	-9.1	-3.5	74	19.7	-18.9	-5.5			
8	181	8.1	0.2	8.1	192	7.7	1.6	7.5	189	5.0	0.8	4.9	158	1.6	-0.6	1.5	100	6.7	-6.6	1.2	78	9.5	-9.3	-1.9	86	15.5	-15.5	-1.2			
9	195	6.3	1.6	6.1	194	7.2	1.8	7.0	194	4.2	1.0	4.1	180	2.3	0.0	2.3	85	3.8	-3.8	-0.3	68	7.7	-7.1	-2.9	182	8.5	0.3	8.5			
10	187	6.1	0.7	6.1	200	5.9	2.0	5.6	185	3.7	0.3	3.7	169	1.6	-0.3	1.6	84	5.3	-5.3	-0.6	118	9.6	-8.5	4.5	98	17.8	-17.6	2.6			
11	180	6.2	0.0	6.2	181	6.9	0.1	6.9	173	6.0	-0.7	6.0	158	2.9	-1.1	2.7	150	3.6	-1.8	3.1	85	5.2	-5.2	-0.5	71	18.6	-17.6	-5.9			
12	175	5.9	-0.5	5.9	193	8.2	1.8	8.0	192	4.0	0.8	3.9	152	2.4	-1.1	2.1	129	2.8	-2.2	1.8	95	6.3	-6.3	0.5	71	13.2	-12.5	-4.2			
13	166	4.9	-1.2	4.7	171	7.6	-1.2	7.5	162	6.1	-1.9	5.8	166	3.4	-0.8	3.3	84	6.0	-6.0	-0.6	78	11.6	-11.3	-2.5	75	20.0	-19.3	-5.1			
14	151	4.5	-2.2	3.9	179	6.4	-0.1	6.4	174	4.6	-0.5	4.6	156	3.0	-1.2	2.7	107	4.7	-4.5	1.4	85	10.3	-10.3	-0.9	58	18.6	-15.8	-9.8			
15	186	7.0	0.7	7.0	188	6.1	0.8	6.0	168	3.5	-0.7	3.4	145	4.0	-2.3	3.3	104	6.7	-6.5	1.6	97	11.5	-11.4	1.4	94	25.0	-24.9	1.8			
16	183	5.0	0.3	5.0	190	5.2	0.9	5.1	195	3.9	1.0	3.8	141	3.3	-2.1	2.6	119	1.8	-1.6	0.9	95	5.7	-5.7	0.5	76	20.2	-19.6	-4.9			
17	183	5.9	0.3	5.9	189	7.3	1.2	7.2	189	5.9	0.9	5.8	270	1.8	1.8	0.0	84	5.6	-5.6	-0.6	69	9.0	-8.4	-3.3	75	19.0	-18.4	-4.9			
18	170	7.7	-1.3	7.6	185	6.4	0.6	6.4	204	3.6	1.5	3.3	149	2.1	-1.1	1.8	77	5.1	-5.0	-1.2	51	7.5	-5.8	-4.7	72	18.0	-17.1	-5.6			
19	195	8.3	2.1	8.0	194	5.7	1.4	5.5	158	3.2	-1.2	3.0	105	2.4	-2.3	0.6	93	3.9	-3.9	0.2	68	6.5	-6.0	-2.4	67	12.3	-11.3	-4.8			
20	177	8.3	-0.5	8.3	181	8.0	0.1	8.0	183	6.1	0.3	6.1	144	3.9	-2.3	3.2	86	3.0	-3.0	-0.2	71	4.2	-4.0	-1.4	74	13.8	-13.3	-3.7			
21	179	6.8	-0.1	6.8	181	7.8	0.1	7.8	169	5.4	-1.0	5.3	140	4.3	-2.8	3.3	99	3.6	-3.6	0.6	75	4.1	-4.0	-1.1	74	11.9	-11.5	-3.2			
22	183	9.1	0.4	9.1	193	7.7	1.7	7.5	181	5.6	0.1	5.6	147	1.7	-0.9	1.4	71	4.6	-4.3	-1.5	67	7.6	-7.0	-2.9	67	19.0	-17.5	-7.4			
23	178	6.3	-0.2	6.3	196	5.9	1.6	5.7	186	4.0	0.4	4.0	133	2.3	-1.7	1.6	79	4.7	-4.6	-0.9	107	7.1	-6.8	2.1	100	13.8	-13.6	2.3			
24	179	5.6	-0.1	5.6	195	6.0	1.6	5.8	189	3.3	0.5	3.3	93	3.3	-3.3	0.2	84	5.1	-5.1	-0.5	87	13.0	-13.0	-0.7	89	20.8	-20.8	-0.3			
25	178	7.1	-0.2	7.1	200	6.6	2.2	6.2	198	3.8	1.2	3.6	102	2.9	-2.8	0.6	100	5.8	-5.7	1.0	78	15.0	-14.7	-3.0	77	26.3	-25.6	-6.0			
26	182	5.3	0.2	5.3	201	6.3	2.3	5.9	193	4.1	0.9	4.0	110	2.0	-1.9	0.7	79	6.2	-6.1	-1.2	82	8.7	-8.6	-1.2	80	19.0	-18.7	-3.2			
27	171	6.0	-0.9	5.9	182	5.7	0.2	5.7	173	4.2	-0.5	4.2	123	4.2	-3.5	2.3	78	6.8	-6.7	-1.4	77	12.0	-11.7	-2.6	76	20.3	-19.7	-4.8			
28	186	4.0	0.4	4.0	195	6.0	1.6	5.8	178	3.5	-0.1	3.5	112	4.3	-4.0	1.6	81	8.6	-8.5	-1.3	76	14.6	-14.1	-3.6	73	18.4	-17.6	-5.4			
29	172	4.1	-0.6	4.1	175	5.2	-0.5	5.2	179	4.0	-0.1	4.0	104	5.5	-5.3	1.3	92	8.5	-8.5	0.3	83	14.4	-14.3	-1.7	74	17.2	-16.5	-4.8			
30	166	5.8	-1.4	5.6	189	5.1	0.8	5.0	184	4.0	0.3	4.0	118	3.4	-3.0	1.6	68	7.4	-6.9	-2.8	70	10.1	-9.5	-3.5	79	18.4	-18.1	-3.5			
31	164	6.9	-1.9	6.6	179	4.6	-0.1	4.6	166	2.1	-0.5	2.0	87	2.0	-2.0	-0.1	78	5.0	-4.9	-1.0	76	13.2	-12.8	-3.1	75	15.2	-14.7	-4.0			

Daily Normals of Upper Air Winds (1971-2000)

AGARTALA

AUGUST

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	178	6.0	-0.2	6.0	176	5.9	-0.4	5.9	161	5.0	-1.6	4.7	130	4.5	-3.5	2.9	88	6.4	-6.4	-0.2	73	10.0	-9.6	-2.9	82	19.1	-18.9	-2.8			
2	166	6.9	-1.7	6.7	174	7.2	-0.7	7.2	153	6.2	-2.8	5.5	128	3.7	-2.9	2.3	82	5.2	-5.2	-0.7	75	9.6	-9.3	-2.5	70	17.7	-16.6	-6.2			
3	178	7.3	-0.3	7.3	182	7.2	0.2	7.2	178	6.6	-0.2	6.6	137	4.5	-3.1	3.3	99	7.2	-7.1	1.1	80	11.9	-11.7	-2.0	108	14.6	-13.9	4.5			
4	182	6.5	0.2	6.5	176	6.1	-0.4	6.1	171	4.0	-0.6	4.0	103	3.9	-3.8	0.9	54	6.1	-4.9	-3.6	76	8.9	-8.7	-2.1	23	8.3	-3.3	-7.6			
5	169	4.2	-0.8	4.1	180	5.4	0.0	5.4	155	4.7	-2.0	4.2	118	4.3	-3.8	2.0	81	6.2	-6.1	-1.0	82	10.0	-9.9	-1.4	73	16.2	-15.5	-4.7			
6	186	6.2	0.7	6.2	166	5.3	-1.3	5.1	146	5.9	-3.3	4.9	133	5.3	-3.9	3.6	69	5.8	-5.4	-2.1	90	12.9	-12.9	-0.1	75	24.1	-23.2	-6.4			
7	186	4.1	0.4	4.1	173	5.0	-0.6	5.0	137	3.4	-2.3	2.5	103	3.9	-3.8	0.9	90	8.8	-8.8	0.0	85	14.4	-14.4	-1.2	85	23.1	-23.0	-2.1			
8	186	6.1	0.6	6.1	174	7.2	-0.7	7.2	154	5.1	-2.2	4.6	99	5.6	-5.5	0.9	85	8.7	-8.7	-0.8	71	11.4	-10.8	-3.8	66	19.6	-17.9	-7.9			
9	185	4.9	0.4	4.9	174	6.0	-0.6	6.0	160	5.0	-1.7	4.7	107	4.5	-4.3	1.3	73	7.3	-7.0	-2.1	74	13.0	-12.5	-3.5	81	22.3	-22.0	-3.4			
10	187	7.7	1.0	7.6	186	6.0	0.6	6.0	189	3.8	0.6	3.8	121	2.6	-2.2	1.3	103	5.7	-5.6	1.3	73	10.0	-9.6	-2.9	69	18.8	-17.5	-6.8			
11	172	6.7	-0.9	6.6	185	4.6	0.4	4.6	180	2.5	0.0	2.5	113	1.5	-1.4	0.6	107	3.1	-3.0	0.9	70	8.4	-7.9	-2.8	66	11.7	-10.7	-4.7			
12	190	7.2	1.2	7.1	192	4.7	1.0	4.6	186	3.8	0.4	3.8	148	2.6	-1.4	2.2	101	2.1	-2.1	0.4	82	7.1	-7.0	-1.0	86	14.8	-14.8	-1.0			
13	197	7.3	2.1	7.0	186	5.0	0.5	5.0	158	5.2	-1.9	4.8	167	2.6	-0.6	2.5	118	5.4	-4.8	2.5	77	11.1	-10.8	-2.5	89	16.7	-16.7	-0.3			
14	198	6.9	2.1	6.6	171	5.5	-0.9	5.4	146	4.7	-2.6	3.9	114	2.7	-2.5	1.1	108	6.0	-5.7	1.9	74	13.3	-12.8	-3.7	79	15.6	-15.3	-3.0			
15	189	6.7	1.0	6.6	176	6.1	-0.4	6.1	164	4.1	-1.1	3.9	153	3.4	-1.5	3.0	104	8.1	-7.9	2.0	85	11.9	-11.8	-1.1	82	18.8	-18.6	-2.7			
16	185	5.8	0.5	5.8	182	5.8	0.2	5.8	160	3.0	-1.0	2.8	106	2.6	-2.5	0.7	76	6.1	-5.9	-1.5	67	10.6	-9.8	-4.1	76	14.9	-14.5	-3.5			
17	179	5.3	-0.1	5.3	172	5.1	-0.7	5.1	163	3.8	-1.1	3.6	130	3.0	-2.3	1.9	91	6.2	-6.2	0.1	73	8.3	-7.9	-2.4	71	19.8	-18.7	-6.5			
18	177	5.1	-0.3	5.1	168	4.9	-1.0	4.8	146	4.0	-2.2	3.3	98	2.7	-2.7	0.4	96	5.5	-5.5	0.6	74	8.9	-8.6	-2.4	90	14.0	-14.0	0.0			
19	173	4.9	-0.6	4.9	174	4.7	-0.5	4.7	181	4.8	0.1	4.8	156	1.7	-0.7	1.6	81	4.9	-4.8	-0.8	76	8.1	-7.9	-2.0	78	15.5	-15.1	-3.3			
20	184	5.9	0.4	5.9	191	5.4	1.0	5.3	170	3.6	-0.6	3.5	162	2.6	-0.8	2.5	89	6.2	-6.2	-0.1	71	10.3	-9.8	-3.3	77	20.3	-19.8	-4.4			
21	182	6.5	0.2	6.5	184	5.8	0.4	5.8	188	4.8	0.7	4.7	155	2.3	-1.0	2.1	85	7.2	-7.2	-0.6	81	9.1	-9.0	-1.5	107	9.3	-8.9	2.8			
22	179	4.9	-0.1	4.9	185	6.2	0.5	6.2	181	4.4	0.1	4.4	152	3.4	-1.6	3.0	108	4.6	-4.4	1.4	75	7.9	-7.6	-2.1	76	16.4	-15.9	-4.0			
23	181	4.2	0.1	4.2	197	5.2	1.5	5.0	204	4.2	1.7	3.8	112	1.6	-1.5	0.6	80	2.7	-2.7	-0.5	69	9.1	-8.5	-3.2	94	20.2	-20.1	1.5			
24	185	3.8	0.3	3.8	207	5.4	2.4	4.8	205	2.6	1.1	2.4	94	3.2	-3.2	0.2	90	5.4	-5.4	0.0	78	10.6	-10.4	-2.2	79	15.7	-15.4	-3.0			
25	160	3.0	-1.0	2.8	191	3.1	0.6	3.0	180	2.3	0.0	2.3	143	1.5	-0.9	1.2	103	4.1	-4.0	0.9	79	5.3	-5.2	-1.0	76	14.0	-13.6	-3.4			
26	172	3.7	-0.5	3.7	160	4.5	-1.5	4.2	143	4.6	-2.8	3.7	114	5.7	-5.2	2.3	104	7.8	-7.6	1.9	89	11.2	-11.2	-0.2	91	12.7	-12.7	0.2			
27	189	3.3	0.5	3.3	173	4.1	-0.5	4.1	151	5.0	-2.4	4.4	121	5.6	-4.8	2.9	100	6.1	-6.0	1.1	94	10.7	-10.7	0.8	90	16.7	-16.7	0.0			
28	167	5.8	-1.3	5.7	174	5.3	-0.6	5.3	160	5.0	-1.7	4.7	158	4.5	-1.7	4.2	92	5.2	-5.2	0.2	98	10.5	-10.4	1.4	75	13.1	-12.7	-3.3			
29	177	5.3	-0.3	5.3	179	4.6	-0.1	4.6	155	3.3	-1.4	3.0	101	2.0	-2.0	0.4	104	3.6	-3.5	0.9	94	8.0	-8.0	0.6	96	16.8	-16.7	1.7			
30	179	4.6	-0.1	4.6	175	4.6	-0.4	4.6	178	3.0	-0.1	3.0	100	2.2	-2.2	0.4	93	5.7	-5.7	0.3	87	8.9	-8.9	-0.4	86	18.0	-18.0	-1.3			
31	169	6.0	-1.1	5.9	181	4.6	0.1	4.6	156	4.4	-1.8	4.0	133	4.0	-2.9	2.7	95	4.7	-4.7	0.4	75	7.7	-7.4	-2.0	75	12.4	-12.0	-3.2			

Daily Normals of Upper Air Winds (1971-2000)

AGARTALA

SEPTEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	167	4.1	-0.9	4.0	174	3.7	-0.4	3.7	138	3.8	-2.5	2.8	126	3.1	-2.5	1.8	114	6.4	-5.8	2.6	96	6.0	-6.0	0.6	80	16.0	-15.8	-2.7			
2	166	6.3	-1.5	6.1	187	6.1	0.7	6.1	167	4.1	-0.9	4.0	127	4.8	-3.8	2.9	88	5.0	-5.0	-0.2	72	7.2	-6.9	-2.2	—	—	—	—			
3	191	4.1	0.8	4.0	180	5.2	0.0	5.2	164	3.5	-1.0	3.4	136	2.8	-1.9	2.0	97	5.2	-5.2	0.6	75	8.8	-8.5	-2.3	79	10.1	-9.9	-1.9			
4	189	4.5	0.7	4.4	185	5.2	0.5	5.2	167	4.5	-1.0	4.4	166	3.3	-0.8	3.2	144	3.7	-2.2	3.0	70	6.2	-5.8	-2.1	78	11.8	-11.6	-2.4			
5	168	4.0	-0.8	3.9	190	5.4	0.9	5.3	191	4.3	0.8	4.2	145	3.3	-1.9	2.7	113	5.3	-4.9	2.1	73	5.9	-5.7	-1.7	65	11.9	-10.8	-5.0			
6	173	3.1	-0.4	3.1	185	4.2	0.4	4.2	163	3.7	-1.1	3.5	139	2.1	-1.4	1.6	90	4.3	-4.3	0.0	68	8.0	-7.4	-3.0	85	14.1	-14.0	-1.3			
7	180	4.0	0.0	4.0	174	4.9	-0.5	4.9	171	3.2	-0.5	3.2	111	4.3	-4.0	1.5	90	4.8	-4.8	0.0	79	9.8	-9.6	-1.8	77	13.2	-12.9	-3.0			
8	187	3.4	0.4	3.4	185	4.3	0.4	4.3	172	2.1	-0.3	2.1	125	2.8	-2.3	1.6	93	4.1	-4.1	0.2	101	6.0	-5.9	1.1	84	11.0	-10.9	-1.1			
9	178	3.6	-0.1	3.6	189	3.7	0.6	3.7	171	3.8	-0.6	3.8	125	2.8	-2.3	1.6	102	2.5	-2.4	0.5	54	6.9	-5.6	-4.0	77	15.6	-15.2	-3.5			
10	197	3.1	0.9	3.0	189	3.8	0.6	3.8	179	3.9	-0.1	3.9	142	3.6	-2.2	2.8	109	6.4	-6.0	2.1	87	9.6	-9.6	-0.5	98	17.0	-16.8	2.4			
11	188	3.4	0.5	3.4	194	4.9	1.2	4.8	193	3.1	0.7	3.0	141	2.2	-1.4	1.7	101	5.4	-5.3	1.0	75	7.0	-6.8	-1.8	62	10.6	-9.4	-5.0			
12	191	3.7	0.7	3.6	197	4.8	1.4	4.6	212	4.0	2.1	3.4	118	5.2	-4.6	2.4	53	3.5	-2.8	-2.1	73	7.5	-7.2	-2.2	80	16.3	-16.0	-2.9			
13	170	4.1	-0.7	4.0	198	4.5	1.4	4.3	201	3.4	1.2	3.2	228	1.5	1.1	1.0	141	4.0	-2.5	3.1	107	5.8	-5.5	1.7	94	9.3	-9.3	0.7			
14	192	4.4	0.9	4.3	197	5.1	1.5	4.9	174	2.8	-0.3	2.8	164	1.5	-0.4	1.4	142	3.1	-1.9	2.4	93	5.0	-5.0	0.3	100	8.9	-8.8	1.5			
15	200	3.2	1.1	3.0	190	4.0	0.7	3.9	211	3.3	1.7	2.8	153	2.2	-1.0	2.0	160	3.0	-1.0	2.8	117	5.1	-4.5	2.3	97	13.8	-13.7	1.8			
16	182	2.4	0.1	2.4	200	3.3	1.1	3.1	191	3.1	0.6	3.0	203	1.3	0.5	1.2	231	2.6	2.0	1.6	79	7.5	-7.4	-1.4	130	7.0	-5.4	4.5			
17	171	2.6	-0.4	2.6	217	3.1	1.9	2.5	216	3.2	1.9	2.6	267	2.0	2.0	0.1	220	1.6	1.0	1.2	62	3.0	-2.6	-1.4	90	5.9	-5.9	0.0			
18	186	4.1	0.4	4.1	213	3.7	2.0	3.1	225	2.5	1.8	1.8	286	2.6	2.5	-0.7	175	1.2	-0.1	1.2	52	3.6	-2.8	-2.2	73	5.8	-5.5	-1.7			
19	193	2.8	0.6	2.7	208	2.1	1.0	1.9	215	1.9	1.1	1.6	305	1.6	1.3	-0.9	240	1.4	1.2	0.7	344	2.2	0.6	-2.1	94	6.5	-6.5	0.4			
20	117	1.6	-1.4	0.7	171	0.6	-0.1	0.6	158	1.1	-0.4	1.0	255	2.0	1.9	0.5	155	1.4	-0.6	1.3	350	4.8	0.8	-4.7	52	5.3	-4.2	-3.3			
21	211	1.7	0.9	1.5	193	2.7	0.6	2.6	225	1.7	1.2	1.2	270	1.2	1.2	0.0	302	2.6	2.2	-1.4	300	2.4	2.1	-1.2	77	5.8	-5.7	-1.3			
22	236	2.7	2.2	1.5	220	3.0	1.9	2.3	222	2.5	1.7	1.9	262	1.5	1.5	0.2	235	2.9	2.4	1.7	115	1.9	-1.7	0.8	96	10.7	-10.6	1.1			
23	194	3.4	0.8	3.3	203	2.6	1.0	2.4	202	1.6	0.6	1.5	275	3.4	3.4	-0.3	151	2.6	-1.3	2.3	151	4.3	-2.1	3.8	91	22.0	-22.0	0.4			
24	240	2.0	1.7	1.0	204	1.7	0.7	1.6	173	1.7	-0.2	1.7	254	2.6	2.5	0.7	291	2.6	2.4	-0.9	210	2.8	1.4	2.4	84	16.0	-15.9	-1.7			
25	193	3.6	0.8	3.5	200	3.2	1.1	3.0	218	2.8	1.7	2.2	207	3.0	1.4	2.7	213	4.2	2.3	3.5	215	3.8	2.2	3.1	46	5.5	-4.0	-3.8			
26	187	2.3	0.3	2.3	203	4.3	1.7	4.0	213	4.2	2.3	3.5	230	3.9	3.0	2.5	211	3.3	1.7	2.8	221	4.6	3.0	3.5	31	4.8	-2.5	-4.1			
27	175	2.1	-0.2	2.1	214	3.4	1.9	2.8	231	3.6	2.8	2.3	246	4.3	3.9	1.7	242	4.5	4.0	2.1	265	3.8	3.8	0.3	71	5.8	-5.5	-1.9			
28	192	3.0	0.6	2.9	220	3.1	2.0	2.4	226	4.9	3.5	3.4	239	4.5	3.9	2.3	261	4.3	4.2	0.7	305	4.5	3.7	-2.6	58	2.6	-2.2	-1.4			
29	207	2.7	1.2	2.4	201	2.2	0.8	2.1	235	2.9	2.4	1.7	253	6.2	5.9	1.8	231	6.4	5.0	4.0	262	6.5	6.4	0.9	120	3.2	-2.8	1.6			
30	183	1.9	0.1	1.9	221	2.0	1.3	1.5	253	2.7	2.6	0.8	243	4.7	4.2	2.1	252	5.5	5.2	1.7	252	2.8	2.7	0.9	94	4.9	-4.9	0.3			

Daily Normals of Upper Air Winds (1971-2000)

10

AGARTALA

OCTOBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	246	1.0	0.9	0.4	203	2.1	0.8	1.9	209	2.5	1.2	2.2	242	4.9	4.3	2.3	243	7.8	7.0	3.5	243	10.3	9.2	4.7	87	4.4	-4.4	-0.2			
2	214	2.3	1.3	1.9	209	2.5	1.2	2.2	215	2.9	1.7	2.4	254	5.6	5.4	1.5	245	8.4	7.6	3.6	223	6.6	4.5	4.8	306	3.7	3.0	-2.2			
3	232	1.1	0.9	0.7	214	1.4	0.8	1.2	241	2.5	2.2	1.2	241	4.5	3.9	2.2	247	8.8	8.1	3.5	268	9.7	9.7	0.4	62	1.7	-1.5	-0.8			
4	218	1.8	1.1	1.4	229	2.1	1.6	1.4	233	2.6	2.1	1.6	256	4.6	4.5	1.1	235	7.0	5.7	4.0	239	5.2	4.5	2.7	231	4.0	3.1	2.5			
5	199	2.8	0.9	2.6	194	3.0	0.7	2.9	203	3.0	1.2	2.8	250	4.9	4.6	1.7	242	9.5	8.4	4.5	235	10.7	8.8	6.1	109	3.7	-3.5	1.2			
6	250	2.0	1.9	0.7	216	2.2	1.3	1.8	242	2.7	2.4	1.3	251	5.4	5.1	1.8	246	8.3	7.6	3.4	253	11.4	10.9	3.4	216	4.7	2.8	3.8			
7	257	1.3	1.3	0.3	212	2.8	1.5	2.4	205	2.3	1.0	2.1	249	5.3	5.0	1.9	245	10.8	9.8	4.6	261	10.4	10.3	1.6	319	6.8	4.5	-5.1			
8	216	2.9	1.7	2.3	225	2.4	1.7	1.7	268	2.5	2.5	0.1	268	7.4	7.4	0.2	259	7.0	6.9	1.3	251	7.2	6.8	2.4	311	4.1	3.1	-2.7			
9	205	1.4	0.6	1.3	229	2.0	1.5	1.3	236	2.2	1.8	1.2	257	6.5	6.3	1.4	260	11.0	10.8	2.0	261	10.9	10.8	1.8	227	4.0	2.9	2.7			
10	273	2.1	2.1	-0.1	238	3.6	3.0	1.9	255	4.2	4.1	1.1	270	7.2	7.2	0.0	271	9.5	9.5	-0.1	267	13.2	13.2	0.6	331	8.7	4.2	-7.6			
11	270	0.8	0.8	0.0	249	1.7	1.6	0.6	268	3.5	3.5	0.1	268	7.0	7.0	0.2	266	10.3	10.3	0.8	268	11.6	11.6	0.4	318	4.2	2.8	-3.1			
12	225	0.7	0.5	0.5	263	0.8	0.8	0.1	243	3.5	3.1	1.6	271	7.7	7.7	-0.1	265	11.5	11.5	1.0	253	9.1	8.7	2.6	313	2.5	1.8	-1.7			
13	216	1.4	0.8	1.1	247	1.5	1.4	0.6	237	2.7	2.3	1.5	260	6.7	6.6	1.2	269	11.2	11.2	0.1	261	11.2	11.1	1.8	288	6.7	6.4	-2.1			
14	202	1.1	0.4	1.0	257	1.3	1.3	0.3	251	4.6	4.4	1.5	252	6.6	6.3	2.0	254	11.1	10.7	3.1	261	13.0	12.8	2.0	270	13.6	13.6	-0.1			
15	243	1.6	1.4	0.7	229	2.1	1.6	1.4	247	3.9	3.6	1.5	247	5.4	5.0	2.1	257	10.8	10.5	2.5	274	14.0	14.0	-1.0	279	11.2	11.1	-1.8			
16	210	1.6	0.8	1.4	238	2.5	2.1	1.3	267	3.9	3.9	0.2	265	7.2	7.2	0.6	264	10.0	9.9	1.0	278	13.7	13.6	-1.8	289	14.7	13.9	-4.7			
17	288	1.3	1.2	-0.4	280	1.1	1.1	-0.2	251	4.6	4.3	1.5	255	8.4	8.1	2.2	253	11.9	11.4	3.5	257	9.7	9.4	2.2	144	9.1	-5.3	7.4			
18	219	1.9	1.2	1.5	200	1.2	0.4	1.1	218	4.1	2.5	3.2	253	4.2	4.0	1.2	265	6.0	6.0	0.5	286	5.1	4.9	-1.4	339	6.6	2.4	-6.1			
19	180	2.3	0.0	2.3	193	3.7	0.8	3.6	233	4.0	3.2	2.4	266	7.3	7.3	0.5	273	13.7	13.7	-0.8	258	13.5	13.2	2.8	243	14.8	13.2	6.6			
20	175	3.4	-0.3	3.4	242	3.0	2.6	1.4	230	3.0	2.3	1.9	260	5.0	4.9	0.9	245	7.5	6.8	3.2	246	8.2	7.5	3.3	195	5.3	1.4	5.1			
21	119	1.3	-1.1	0.6	231	2.1	1.6	1.3	250	4.4	4.1	1.5	274	8.1	8.1	-0.5	271	13.6	13.6	-0.2	254	13.7	13.2	3.7	221	11.3	7.5	8.5			
22	270	1.2	1.2	0.0	193	0.9	0.2	0.9	264	3.9	3.9	0.4	259	10.3	10.1	1.9	270	15.4	15.4	-0.1	265	17.4	17.3	1.4	256	10.5	10.2	2.6			
23	315	1.3	0.9	-0.9	220	1.6	1.0	1.2	261	2.6	2.6	0.4	272	10.0	10.0	-0.4	255	15.0	14.5	3.9	265	9.5	9.5	0.9	261	15.6	15.4	2.4			
24	288	1.3	1.2	-0.4	255	2.0	1.9	0.5	259	4.6	4.5	0.9	264	9.1	9.0	1.0	264	13.5	13.4	1.5	249	13.9	13.0	5.0	263	28.5	28.3	3.4			
25	354	1.8	0.2	-1.8	297	1.6	1.4	-0.7	272	4.7	4.7	-0.2	275	12.7	12.6	-1.2	270	19.8	19.8	0.1	275	24.5	24.4	-2.3	231	14.7	11.5	9.2			
26	345	2.7	0.7	-2.6	289	2.4	2.3	-0.8	263	5.6	5.6	0.7	272	9.8	9.8	-0.3	269	14.2	14.2	0.2	254	19.1	18.3	5.3	247	12.5	11.5	4.9			
27	84	0.9	-0.9	-0.1	225	1.1	0.8	0.8	246	4.2	3.8	1.7	266	10.6	10.6	0.7	258	21.5	21.0	4.5	249	25.2	23.5	9.0	276	22.0	21.9	-2.3			
28	112	1.6	-1.5	0.6	214	0.4	0.2	0.3	235	3.3	2.7	1.9	265	11.0	11.0	1.0	265	16.9	16.8	1.4	276	18.3	18.2	-1.8	297	7.0	6.2	-3.2			
29	189	2.5	0.4	2.5	225	1.7	1.2	1.2	242	4.3	3.8	2.0	260	11.2	11.0	2.0	258	18.1	17.7	3.9	250	18.8	17.6	6.5	270	19.2	19.2	0.0			
30	198	0.9	0.3	0.9	170	1.1	-0.2	1.1	240	3.4	2.9	1.7	247	9.2	8.5	3.6	263	15.7	15.6	1.9	263	16.1	16.0	2.0	252	7.8	7.4	2.4			
31	11	0.5	-0.1	-0.5	284	0.4	0.4	-0.1	257	4.6	4.5	1.0	264	8.1	8.0	0.9	254	18.2	17.5	4.9	248	24.0	22.2	9.1	299	18.0	15.8	-8.7			

Daily Normals of Upper Air Winds (1971-2000)

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AGARTALA

NOVEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	343	1.0	0.3	-1.0	281	1.6	1.6	-0.3	264	4.5	4.5	0.5	251	9.2	8.7	3.0	268	18.4	18.4	0.8	256	18.1	17.5	4.5	247	12.5	11.5	4.9			
2	342	1.3	0.4	-1.2	283	0.9	0.9	-0.2	250	4.5	4.2	1.5	269	11.6	11.6	0.3	268	17.0	17.0	0.5	265	21.5	21.4	2.0	294	15.4	14.0	-6.3			
3	315	1.0	0.7	-0.7	249	1.4	1.3	0.5	249	4.0	3.7	1.4	275	8.6	8.6	-0.8	267	18.2	18.2	1.1	260	21.6	21.3	3.6	266	16.3	16.3	1.1			
4	345	2.0	0.5	-1.9	302	1.9	1.6	-1.0	256	3.7	3.6	0.9	261	9.3	9.2	1.5	256	18.7	18.1	4.5	264	22.4	22.3	2.2	250	20.0	18.8	6.8			
5	319	1.1	0.7	-0.8	270	2.1	2.1	0.0	255	4.7	4.5	1.2	275	10.4	10.4	-0.9	256	21.0	20.4	4.9	262	22.8	22.6	3.3	271	9.0	9.0	-0.1			
6	340	1.2	0.4	-1.1	290	1.2	1.1	-0.4	263	4.2	4.2	0.5	278	12.0	11.9	-1.6	264	22.6	22.5	2.2	270	28.5	28.5	0.1	271	12.3	12.3	-0.2			
7	356	1.6	0.1	-1.6	358	2.7	0.1	-2.7	255	4.2	4.1	1.1	268	13.1	13.1	0.4	258	23.4	22.9	4.7	262	24.6	24.3	3.6	282	12.6	12.3	-2.7			
8	333	0.9	0.4	-0.8	153	0.2	-0.1	0.2	276	2.9	2.9	-0.3	275	13.1	13.0	-1.2	260	21.4	21.1	3.8	257	27.7	27.0	6.2	300	13.8	12.0	-6.8			
9	328	0.9	0.5	-0.8	297	0.4	0.4	-0.2	233	2.5	2.0	1.5	285	9.5	9.2	-2.5	269	18.7	18.7	0.2	262	21.0	20.8	2.8	305	7.0	5.7	-4.0			
10	175	2.4	-0.2	2.4	242	1.7	1.5	0.8	259	4.2	4.1	0.8	254	13.0	12.5	3.6	246	25.3	23.2	10.2	257	24.2	23.6	5.4	84	18.0	-17.9	-1.9			
11	76	0.4	-0.4	-0.1	270	1.5	1.5	0.0	283	4.8	4.7	-1.1	274	12.2	12.2	-0.8	272	17.2	17.2	-0.7	271	20.9	20.9	-0.2	286	17.0	16.4	-4.6			
12	342	0.9	0.3	-0.9	267	1.8	1.8	0.1	251	5.0	4.7	1.6	259	13.1	12.9	2.5	263	27.4	27.2	3.4	262	32.4	32.1	4.4	258	17.0	16.6	3.5			
13	331	1.3	0.6	-1.1	270	1.6	1.6	0.0	283	2.8	2.7	-0.6	283	12.9	12.5	-3.0	272	20.8	20.8	-0.6	268	28.3	28.3	0.8	287	15.2	14.5	-4.4			
14	5	1.2	-0.1	-1.2	345	2.0	0.5	-1.9	260	2.8	2.8	0.5	271	10.9	10.9	-0.2	298	20.4	18.0	-9.7	278	31.4	31.1	-4.1	284	22.5	21.8	-5.5			
15	330	0.8	0.4	-0.7	270	1.1	1.1	0.0	283	3.5	3.4	-0.8	264	14.3	14.2	1.6	256	23.3	22.6	5.7	265	28.6	28.5	2.4	—	—	—	—			
16	4	1.5	-0.1	-1.5	211	1.2	0.6	1.0	279	5.7	5.6	-0.9	283	13.8	13.4	-3.2	270	22.0	22.0	0.1	272	28.8	28.8	-1.2	259	21.3	20.9	4.2			
17	30	0.8	-0.4	-0.7	217	0.5	0.3	0.4	259	5.4	5.3	1.0	281	12.3	12.1	-2.3	274	25.0	24.9	-1.8	266	25.8	25.7	1.8	237	32.0	26.8	17.4			
18	270	1.1	1.1	0.0	231	2.2	1.7	1.4	270	5.7	5.7	0.0	277	11.4	11.3	-1.3	262	21.6	21.4	3.0	253	31.0	29.6	9.2	—	—	—	—			
19	31	0.6	-0.3	-0.5	216	0.9	0.5	0.7	257	4.1	4.0	0.9	269	11.0	11.0	0.2	265	25.5	25.4	2.2	249	26.0	24.2	9.4	274	13.0	13.0	-0.9			
20	36	0.9	-0.5	-0.7	214	0.4	0.2	0.3	268	4.6	4.6	0.2	270	13.5	13.5	-0.1	260	25.9	25.5	4.6	267	21.3	21.3	1.3	241	23.0	20.1	11.1			
21	13	2.3	-0.5	-2.2	259	0.5	0.5	0.1	283	5.3	5.2	-1.2	270	13.5	13.5	0.1	265	27.2	27.1	2.6	264	27.9	27.8	2.7	269	22.4	22.4	0.3			
22	342	2.0	0.6	-1.9	180	0.1	0.0	0.1	276	5.0	5.0	-0.5	266	12.8	12.8	1.0	258	26.4	25.8	5.4	255	30.3	29.2	8.0	249	14.0	13.1	5.0			
23	214	1.4	0.8	1.2	213	2.0	1.1	1.7	274	6.3	6.3	-0.4	264	15.5	15.4	1.6	255	28.5	27.5	7.4	258	27.3	26.7	5.9	251	14.6	13.8	4.7			
24	283	1.3	1.3	-0.3	268	2.3	2.3	0.1	274	6.6	6.6	-0.5	269	14.1	14.1	0.3	256	27.1	26.3	6.7	253	28.9	27.6	8.6	280	24.0	23.6	-4.2			
25	343	2.1	0.6	-2.0	279	1.2	1.2	-0.2	275	6.3	6.3	-0.5	266	14.1	14.1	0.9	255	23.7	22.9	6.0	266	30.4	30.3	2.1	242	45.0	39.7	21.1			
26	337	1.5	0.6	-1.4	274	1.4	1.4	-0.1	278	5.8	5.7	-0.8	269	13.3	13.3	0.2	268	26.8	26.8	0.8	260	30.9	30.4	5.4	265	28.8	28.7	2.4			
27	302	1.5	1.3	-0.8	270	0.7	0.7	0.0	271	6.1	6.1	-0.1	270	14.0	14.0	-0.1	263	24.6	24.4	3.1	264	31.0	30.8	3.1	269	40.0	40.0	0.7			
28	184	1.4	0.1	1.4	254	2.2	2.1	0.6	269	8.0	8.0	0.2	268	17.9	17.9	0.6	254	26.3	25.3	7.1	255	35.0	33.8	9.2	273	28.0	28.0	-1.5			
29	288	0.3	0.3	-0.1	236	1.8	1.5	1.0	258	8.5	8.3	1.7	259	19.1	18.7	3.7	254	24.9	24.0	6.8	273	32.5	32.5	-1.8	—	—	—	—			
30	304	0.4	0.3	-0.2	225	1.4	1.0	1.0	273	6.8	6.8	-0.3	282	15.8	15.5	-3.2	259	25.9	25.4	5.0	254	29.8	28.6	8.3	—	—	—	—			

Daily Normals of Upper Air Winds (1971-2000)

AGARTALA

DECEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	297	1.3	1.2	-0.6	241	1.3	1.1	0.6	282	7.6	7.4	-1.6	270	15.5	15.5	0.1	257	25.2	24.5	5.7	254	26.9	25.9	7.4	266	43.0	42.9	2.9			
2	14	0.4	-0.1	-0.4	294	1.2	1.1	-0.5	282	6.9	6.8	-1.4	272	15.8	15.8	-0.5	260	27.0	26.6	4.5	253	31.8	30.4	9.4	—	—	—	—			
3	360	2.3	0.0	-2.3	297	0.9	0.8	-0.4	272	7.8	7.8	-0.3	273	15.1	15.1	-0.8	273	34.3	34.3	-1.7	265	36.9	36.8	3.3	—	—	—	—			
4	360	0.7	0.0	-0.7	331	1.3	0.6	-1.1	273	8.8	8.8	-0.5	272	12.1	12.1	-0.5	275	26.3	26.2	-2.1	260	34.6	34.1	6.1	260	38.6	38.0	6.6			
5	297	1.3	1.2	-0.6	291	1.7	1.6	-0.6	281	8.1	8.0	-1.5	277	14.9	14.8	-1.7	256	27.1	26.3	6.7	255	30.8	29.7	8.1	272	16.0	16.0	-0.6			
6	356	1.6	0.1	-1.6	300	0.8	0.7	-0.4	285	6.3	6.1	-1.6	273	14.0	14.0	-0.8	254	26.9	25.9	7.4	250	39.5	37.2	13.3	—	—	—	—			
7	344	1.5	0.4	-1.4	277	1.6	1.6	-0.2	279	6.2	6.1	-1.0	267	13.0	13.0	0.6	266	23.4	23.3	1.8	256	30.5	29.5	7.6	216	4.9	2.9	4.0			
8	315	1.4	1.0	-1.0	259	1.0	1.0	0.2	269	7.1	7.1	0.1	275	15.0	15.0	-1.2	266	22.9	22.9	1.5	261	32.2	31.8	4.8	220	34.0	21.9	26.0			
9	328	1.5	0.8	-1.3	229	1.8	1.4	1.2	283	7.2	7.0	-1.6	264	16.3	16.2	1.6	268	32.1	32.1	1.4	258	29.6	28.9	6.3	283	25.4	24.8	-5.6			
10	276	0.9	0.9	-0.1	255	2.0	1.9	0.5	266	8.6	8.6	0.6	268	16.6	16.6	0.5	261	28.4	28.1	4.4	261	34.4	34.0	5.4	272	35.0	35.0	-1.2			
11	315	1.6	1.1	-1.1	245	2.1	1.9	0.9	275	6.4	6.4	-0.6	274	14.5	14.5	-1.0	279	26.9	26.6	-4.3	259	30.4	29.9	5.6	—	—	—	—			
12	298	1.5	1.3	-0.7	297	2.5	2.2	-1.1	275	8.1	8.1	-0.7	271	17.3	17.3	-0.2	276	26.2	26.1	-2.6	259	36.0	35.3	6.9	—	—	—	—			
13	322	1.1	0.7	-0.9	220	1.6	1.0	1.2	273	5.9	5.9	-0.3	279	10.7	10.6	-1.6	267	26.4	26.4	1.5	256	32.7	31.8	7.8	—	—	—	—			
14	217	0.5	0.3	0.4	239	1.7	1.5	0.9	281	7.2	7.1	-1.4	278	16.3	16.1	-2.3	268	31.3	31.3	1.2	269	45.6	45.6	0.6	—	—	—	—			
15	266	1.3	1.3	0.1	289	2.4	2.3	-0.8	282	8.6	8.4	-1.8	272	16.9	16.9	-0.6	265	34.2	34.0	3.2	264	32.9	32.7	3.2	—	—	—	—			
16	319	1.1	0.7	-0.8	274	1.5	1.5	-0.1	288	6.0	5.7	-1.8	275	14.3	14.2	-1.2	275	26.1	26.0	-2.1	278	26.1	25.9	-3.6	280	9.9	9.8	-1.7			
17	284	0.4	0.4	-0.1	242	1.9	1.7	0.9	280	7.8	7.7	-1.4	272	21.7	21.7	-0.8	267	32.2	32.2	1.5	266	32.1	32.0	2.1	—	—	—	—			
18	322	1.6	1.0	-1.3	270	1.9	1.9	0.0	271	7.8	7.8	-0.2	263	16.3	16.2	1.9	272	26.9	26.9	-1.1	258	39.7	38.8	8.5	—	—	—	—			
19	117	0.2	-0.2	0.1	312	1.2	0.9	-0.8	282	7.0	6.8	-1.5	283	16.2	15.8	-3.6	264	28.0	27.8	3.1	265	35.9	35.8	2.9	227	55.0	40.2	37.5			
20	7	0.8	-0.1	-0.8	45	0.3	-0.2	-0.2	290	7.2	6.8	-2.5	275	16.8	16.7	-1.6	258	31.3	30.7	6.3	260	37.3	36.8	6.2	—	—	—	—			
21	333	0.9	0.4	-0.8	279	1.3	1.3	-0.2	295	8.6	7.8	-3.7	283	17.7	17.2	-4.0	271	28.7	28.7	-0.4	262	24.1	23.9	3.2	281	28.2	27.6	-5.6			
22	360	1.4	0.0	-1.4	322	1.1	0.7	-0.9	293	7.2	6.6	-2.8	277	18.7	18.5	-2.4	269	31.5	31.5	0.8	261	31.0	30.6	5.0	—	—	—	—			
23	261	1.2	1.2	0.2	238	1.9	1.6	1.0	271	7.4	7.4	-0.1	271	16.1	16.1	-0.2	263	32.1	31.9	3.8	264	30.7	30.5	3.1	280	19.2	18.9	-3.5			
24	346	1.6	0.4	-1.6	241	1.0	0.9	0.5	272	5.3	5.3	-0.2	267	18.2	18.2	0.8	264	31.0	30.8	3.2	256	23.0	22.3	5.7	270	31.2	31.2	0.2			
25	225	0.3	0.2	0.2	274	1.6	1.6	-0.1	266	7.3	7.3	0.5	275	17.0	16.9	-1.5	268	32.8	32.8	0.9	277	31.8	31.6	-3.9	260	21.6	21.3	3.8			
26	346	1.6	0.4	-1.6	305	1.2	1.0	-0.7	286	6.4	6.1	-1.8	276	21.4	21.3	-2.4	270	29.8	29.8	0.1	268	30.8	30.8	1.0	—	—	—	—			
27	247	1.5	1.4	0.6	278	1.4	1.4	-0.2	286	9.3	9.0	-2.5	271	19.9	19.9	-0.5	265	30.1	30.0	2.4	268	29.1	29.1	1.1	—	—	—	—			
28	108	0.3	-0.3	0.1	268	2.8	2.8	0.1	273	11.0	11.0	-0.6	264	18.9	18.8	2.0	273	28.2	28.2	-1.5	279	32.0	31.6	-5.0	—	—	—	—			
29	225	0.6	0.4	0.4	297	1.6	1.4	-0.7	279	9.7	9.6	-1.5	275	20.7	20.6	-1.9	265	32.8	32.7	2.6	271	28.9	28.9	-0.6	258	31.0	30.3	6.4			
30	307	1.0	0.8	-0.6	264	1.8	1.8	0.2	266	7.3	7.3	0.5	269	17.8	17.8	0.3	258	32.3	31.6	6.7	257	36.8	35.9	8.0	280	18.0	17.7	-3.1			
31	252	0.9	0.9	0.3	270	2.4	2.4	0.0	283	9.3	9.1	-2.1	278	20.7	20.5	-2.9	270	35.6	35.6	-0.1	280	35.7	35.2	-5.9	294	28.0	25.6	-11.4			

Daily Normals of Upper Air Winds (1971-2000)

AHMEDABAD

JANUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	53	3.4	-2.7	-2.0	340	1.2	0.4	-1.1	272	6.6	6.6	-0.2	277	16.2	16.1	-2.1	267	33.3	33.3	1.7	258	38.0	37.2	7.9	259	26.4	25.9	5.2
2	23	2.5	-1.0	-2.3	333	1.1	0.5	-1.0	276	8.1	8.0	-0.9	273	16.4	16.4	-0.8	270	36.4	36.4	0.0	266	40.0	39.9	2.7	265	22.3	22.2	1.8
3	33	2.4	-1.3	-2.0	336	1.2	0.5	-1.1	284	6.6	6.4	-1.6	273	15.8	15.8	-0.8	265	36.3	36.2	2.9	263	44.5	44.1	5.6	244	31.6	28.5	13.6
4	34	2.3	-1.3	-1.9	298	1.5	1.3	-0.7	273	7.5	7.5	-0.4	273	15.1	15.1	-0.9	273	36.0	35.9	-2.0	274	35.8	35.7	-2.5	286	28.3	27.2	-7.9
5	36	1.7	-1.0	-1.4	300	0.8	0.7	-0.4	272	6.2	6.2	-0.2	268	17.9	17.9	0.5	268	34.1	34.1	1.3	268	42.0	42.0	1.5	288	29.4	27.9	-9.2
6	17	2.1	-0.6	-2.0	257	1.8	1.8	0.4	269	6.9	6.9	0.1	274	17.7	17.7	-1.2	270	33.9	33.9	0.2	272	36.6	36.6	-1.5	271	25.2	25.2	-0.4
7	7	0.8	-0.1	-0.8	278	1.5	1.5	-0.2	271	8.2	8.2	-0.2	272	18.7	18.7	-0.8	267	34.0	33.9	1.9	274	39.7	39.6	-2.7	261	24.7	24.4	3.8
8	45	0.7	-0.5	-0.5	256	1.6	1.6	0.4	266	6.6	6.6	0.5	268	17.2	17.2	0.7	265	31.5	31.4	2.8	266	34.7	34.6	2.5	260	21.6	21.3	3.8
9	352	0.7	0.1	-0.7	273	1.8	1.8	-0.1	271	7.8	7.8	-0.1	271	19.0	19.0	-0.4	271	33.3	33.3	-0.4	256	43.4	42.0	10.8	273	33.7	33.7	-1.7
10	22	1.8	-0.7	-1.7	264	1.0	1.0	0.1	268	7.0	7.0	0.3	270	18.6	18.6	0.0	267	31.8	31.8	1.4	270	35.7	35.7	-0.2	270	24.8	24.8	0.1
11	294	1.0	0.9	-0.4	307	2.6	2.1	-1.6	269	7.9	7.9	0.2	274	19.2	19.1	-1.4	273	34.8	34.8	-1.7	269	40.4	40.4	0.5	266	28.3	28.2	2.2
12	4	1.4	-0.1	-1.4	299	1.0	0.9	-0.5	278	9.4	9.3	-1.3	277	20.9	20.7	-2.7	269	33.9	33.9	0.5	272	36.1	36.1	-1.5	274	27.6	27.5	-2.1
13	33	1.7	-0.9	-1.4	286	1.5	1.4	-0.4	269	8.3	8.3	0.2	266	20.6	20.6	1.3	270	35.1	35.1	0.3	267	45.1	45.0	2.7	267	40.3	40.2	2.2
14	286	2.5	2.4	-0.7	270	1.9	1.9	0.0	261	9.9	9.8	1.5	265	22.2	22.1	1.8	271	42.3	42.3	-0.9	270	42.4	42.4	0.3	288	23.1	21.9	-7.2
15	318	3.9	2.6	-2.9	270	4.0	4.0	0.0	265	10.1	10.1	0.8	272	21.2	21.2	-0.7	270	38.0	38.0	0.3	276	41.8	41.6	-4.1	278	24.7	24.4	-3.6
16	41	4.3	-2.8	-3.2	329	2.1	1.1	-1.8	269	8.5	8.5	0.1	270	19.7	19.7	0.1	263	36.4	36.1	4.7	261	39.1	38.6	6.4	275	21.9	21.8	-1.8
17	56	3.6	-3.0	-2.0	307	0.5	0.4	-0.3	269	7.5	7.5	0.1	276	16.5	16.4	-1.6	277	35.5	35.3	-4.1	271	39.7	39.7	-0.8	264	28.7	28.6	2.8
18	53	2.0	-1.6	-1.2	301	1.7	1.5	-0.9	262	8.3	8.2	1.1	266	21.7	21.7	1.4	272	38.1	38.1	-1.2	266	43.1	43.0	2.8	281	25.2	24.7	-5.0
19	315	3.1	2.2	-2.2	274	2.6	2.6	-0.2	274	9.3	9.3	-0.7	276	20.3	20.2	-2.1	274	36.7	36.6	-2.7	273	35.8	35.8	-1.7	287	19.7	18.8	-5.8
20	334	2.8	1.2	-2.5	301	1.7	1.5	-0.9	273	8.3	8.3	-0.4	267	20.7	20.7	1.2	265	37.0	36.8	3.4	262	39.5	39.1	5.4	265	28.7	28.6	2.4
21	346	1.6	0.4	-1.6	291	2.2	2.1	-0.8	263	9.5	9.4	1.2	279	20.6	20.4	-3.1	266	34.6	34.5	2.3	253	36.3	34.8	10.5	250	34.8	32.7	11.9
22	355	2.2	0.2	-2.2	309	1.3	1.0	-0.8	268	9.2	9.2	0.3	275	21.4	21.3	-1.8	270	35.9	35.9	0.3	266	37.7	37.6	2.7	259	16.9	16.6	3.1
23	30	0.8	-0.4	-0.7	302	1.3	1.1	-0.7	271	7.8	7.8	-0.2	273	18.7	18.7	-1.1	276	34.3	34.1	-3.6	282	36.3	35.5	-7.8	270	29.6	29.6	0.0
24	24	3.2	-1.3	-2.9	252	2.2	2.1	0.7	261	8.2	8.1	1.3	269	17.9	17.9	0.2	273	32.7	32.7	-1.5	271	35.7	35.7	-0.9	270	16.0	16.0	0.0
25	21	1.7	-0.6	-1.6	273	1.8	1.8	-0.1	252	8.0	7.6	2.5	266	22.0	21.9	1.6	266	30.7	30.6	1.9	271	40.8	40.8	-0.7	273	39.2	39.2	-1.9
26	351	0.6	0.1	-0.6	272	2.6	2.6	-0.1	263	8.6	8.5	1.0	271	20.7	20.7	-0.3	269	35.5	35.5	0.4	265	41.7	41.5	3.8	299	28.0	24.5	-13.6
27	333	3.3	1.5	-2.9	289	2.8	2.6	-0.9	260	9.7	9.6	1.7	271	22.1	22.1	-0.2	266	36.3	36.2	2.4	265	38.0	37.8	3.5	273	21.2	21.2	-1.1
28	15	2.8	-0.7	-2.7	319	3.3	2.2	-2.5	277	10.9	10.8	-1.3	277	22.7	22.5	-2.9	275	38.5	38.3	-3.6	268	46.8	46.8	2.0	260	16.0	15.8	2.8
29	14	4.2	-1.0	-4.1	313	1.9	1.4	-1.3	274	9.1	9.1	-0.6	275	20.8	20.7	-1.9	270	38.1	38.1	0.1	272	38.9	38.9	-1.2	281	27.2	26.7	-5.4
30	338	2.2	0.8	-2.0	286	2.6	2.5	-0.7	271	10.1	10.1	-0.1	271	22.9	22.9	-0.5	270	37.3	37.3	-0.3	269	40.8	40.8	0.5	276	29.8	29.7	-2.9
31	4	1.5	-0.1	-1.5	294	2.2	2.0	-0.9	267	10.7	10.7	0.5	270	22.3	22.3	0.1	273	38.6	38.6	-1.7	277	47.8	47.5	-5.5	278	34.4	34.1	-4.8

Daily Normals of Upper Air Winds (1971-2000)

AHMEDABAD

FEBRUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	360	2.3	0.0	-2.3	322	1.8	1.1	-1.4	280	8.1	8.0	-1.4	273	22.6	22.6	-1.3	269	35.8	35.8	0.7	272	42.9	42.9	-1.2	277	29.0	28.8	-3.5			
2	333	1.8	0.8	-1.6	317	1.8	1.2	-1.3	266	10.8	10.8	0.8	266	21.5	21.4	1.6	273	38.6	38.5	-2.0	273	57.9	57.8	-3.4	269	31.5	31.5	0.4			
3	348	2.5	0.5	-2.4	306	2.6	2.1	-1.5	269	8.9	8.9	0.2	269	19.8	19.8	0.3	274	38.6	38.5	-2.4	275	51.2	51.0	-4.5	274	41.0	40.9	-2.9			
4	342	2.3	0.7	-2.2	280	3.4	3.3	-0.6	271	10.3	10.3	-0.2	272	23.3	23.3	-1.0	276	38.7	38.5	-3.9	272	45.1	45.1	-1.9	270	27.6	27.6	0.2			
5	4	2.7	-0.2	-2.7	333	1.6	0.7	-1.4	294	7.7	7.0	-3.1	283	19.6	19.1	-4.5	277	39.1	38.8	-5.1	273	40.3	40.3	-1.8	266	28.1	28.0	1.8			
6	33	3.7	-2.0	-3.1	198	0.9	0.3	0.9	277	8.1	8.0	-1.0	282	18.6	18.2	-3.9	279	36.5	36.0	-5.9	273	41.5	41.4	-2.4	277	36.7	36.4	-4.5			
7	326	2.2	1.2	-1.8	299	1.8	1.6	-0.9	275	7.3	7.3	-0.6	280	22.3	22.0	-3.9	280	33.3	32.8	-5.9	282	44.5	43.6	-9.1	280	24.0	23.6	-4.3			
8	304	3.4	2.8	-1.9	304	2.5	2.1	-1.4	283	10.4	10.1	-2.3	284	21.2	20.6	-5.2	283	35.8	34.9	-8.1	279	40.4	39.9	-6.5	282	18.7	18.3	-4.0			
9	3	2.1	-0.1	-2.1	349	1.5	0.3	-1.5	282	7.5	7.3	-1.5	283	19.0	18.5	-4.2	281	35.9	35.3	-6.7	278	37.5	37.1	-5.4	297	27.5	24.5	-12.4			
10	340	1.5	0.5	-1.4	293	2.1	1.9	-0.8	272	9.5	9.5	-0.3	279	19.3	19.0	-3.1	282	31.3	30.6	-6.6	282	34.2	33.4	-7.3	270	14.4	14.4	0.1			
11	12	1.9	-0.4	-1.9	282	1.9	1.9	-0.4	271	8.6	8.6	-0.1	275	18.6	18.5	-1.7	281	32.8	32.1	-6.5	281	38.2	37.5	-7.4	272	32.2	32.2	-1.2			
12	49	0.9	-0.7	-0.6	260	2.7	2.7	0.5	263	8.6	8.5	1.1	268	18.5	18.5	0.5	269	33.1	33.1	0.5	266	42.0	41.9	3.0	277	31.9	31.6	-4.1			
13	349	0.5	0.1	-0.5	277	3.2	3.2	-0.4	257	9.6	9.4	2.1	266	22.3	22.2	1.5	269	37.4	37.4	0.9	255	39.2	37.8	10.4	276	32.8	32.6	-3.7			
14	279	1.8	1.8	-0.3	284	3.6	3.5	-0.9	261	10.6	10.5	1.6	263	21.2	21.0	2.7	264	37.5	37.3	3.9	256	41.6	40.4	10.1	256	31.4	30.5	7.6			
15	291	2.2	2.1	-0.8	278	2.9	2.9	-0.4	265	9.9	9.9	0.8	269	21.3	21.3	0.2	265	38.0	37.9	3.1	268	40.2	40.2	1.2	268	13.6	13.6	0.4			
16	309	2.2	1.7	-1.4	298	2.1	1.9	-1.0	268	9.8	9.8	0.3	268	22.3	22.3	0.9	267	40.0	40.0	1.9	261	42.8	42.2	6.9	250	30.6	28.8	10.4			
17	309	3.2	2.5	-2.0	280	2.3	2.3	-0.4	261	10.6	10.5	1.7	269	20.8	20.8	0.2	263	40.1	39.8	4.9	262	40.3	39.9	5.7	270	39.6	39.6	-0.1			
18	332	3.0	1.4	-2.6	281	2.0	2.0	-0.4	254	7.8	7.5	2.1	269	21.5	21.5	0.2	272	38.5	38.5	-1.1	269	42.9	42.9	0.6	280	29.8	29.3	-5.2			
19	283	2.6	2.5	-0.6	270	3.6	3.6	0.0	268	10.3	10.3	0.4	269	21.6	21.6	0.4	268	35.2	35.2	1.2	264	41.2	40.9	4.6	254	31.5	30.3	8.6			
20	306	2.2	1.8	-1.3	286	2.5	2.4	-0.7	268	8.9	8.9	0.3	275	19.6	19.5	-1.6	270	34.4	34.4	0.2	265	40.7	40.6	3.4	274	27.7	27.6	-1.9			
21	309	3.2	2.5	-2.0	294	2.2	2.0	-0.9	280	9.0	8.9	-1.6	283	18.7	18.2	-4.1	279	33.0	32.6	-5.3	277	41.0	40.7	-4.7	280	24.6	24.3	-4.1			
22	335	2.1	0.9	-1.9	295	1.4	1.3	-0.6	277	6.6	6.6	-0.8	275	18.7	18.6	-1.5	270	35.9	35.9	0.0	276	39.8	39.6	-3.9	292	31.0	28.7	-11.6			
23	356	1.6	0.1	-1.6	280	2.3	2.3	-0.4	267	8.4	8.4	0.4	275	18.8	18.7	-1.7	270	36.5	36.5	-0.2	269	38.2	38.2	0.9	275	26.6	26.5	-2.4			
24	276	1.8	1.8	-0.2	304	2.2	1.8	-1.2	265	7.5	7.5	0.6	275	17.3	17.2	-1.6	269	31.8	31.8	0.8	267	40.5	40.5	1.9	283	31.7	30.9	-7.2			
25	288	2.2	2.1	-0.7	297	2.9	2.6	-1.3	264	9.2	9.1	1.0	274	16.9	16.9	-1.2	274	31.9	31.8	-2.0	263	42.4	42.1	4.9	288	27.3	26.0	-8.4			
26	339	1.4	0.5	-1.3	292	2.9	2.7	-1.1	275	9.6	9.6	-0.8	278	20.6	20.4	-2.8	268	29.2	29.2	0.8	277	37.3	37.1	-4.3	285	29.9	28.9	-7.5			
27	315	2.4	1.7	-1.7	285	3.1	3.0	-0.8	281	8.1	8.0	-1.5	282	17.7	17.3	-3.7	277	32.4	32.2	-3.8	279	41.5	41.0	-6.5	277	31.7	31.5	-3.9			
28	324	2.2	1.3	-1.8	303	3.0	2.5	-1.6	277	7.3	7.2	-0.9	276	17.6	17.5	-1.7	277	32.1	31.8	-4.1	276	39.7	39.5	-4.3	255	14.7	14.2	3.8			
29	252	2.9	2.8	0.9	292	3.2	3.0	-1.2	267	7.7	7.7	0.4	270	19.2	19.2	0.0	278	32.1	31.8	-4.3	226	18.0	12.9	12.5	227	16.0	11.7	10.9			

Daily Normals of Upper Air Winds (1971-2000)

15

AHMEDABAD

MARCH

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	349	1.6	0.3	-1.6	315	2.7	1.9	-1.9	282	8.2	8.0	-1.7	278	17.2	17.0	-2.3	275	34.1	33.9	-3.2	278	35.6	35.2	-5.2	270	22.4	22.4	0.0			
2	318	3.9	2.6	-2.9	301	2.7	2.3	-1.4	279	8.9	8.8	-1.4	272	17.5	17.5	-0.7	279	30.5	30.1	-4.9	274	39.9	39.8	-2.8	257	27.1	26.4	6.3			
3	302	1.5	1.3	-0.8	273	2.1	2.1	-0.1	259	7.5	7.4	1.4	270	14.9	14.9	-0.1	280	27.1	26.7	-4.7	279	34.3	33.9	-5.5	269	22.0	22.0	0.4			
4	279	4.3	4.2	-0.7	274	3.1	3.1	-0.2	260	8.8	8.7	1.5	269	16.0	16.0	0.2	273	30.0	30.0	-1.6	287	31.5	30.2	-9.0	294	19.1	17.4	-7.8			
5	276	3.9	3.9	-0.4	268	3.4	3.4	0.1	268	9.3	9.3	0.4	270	17.1	17.1	0.1	276	26.8	26.7	-2.8	283	29.6	28.9	-6.5	281	24.9	24.4	-4.9			
6	275	3.5	3.5	-0.3	293	2.8	2.6	-1.1	262	9.3	9.2	1.3	260	19.2	18.9	3.4	271	30.1	30.1	-0.4	275	32.0	31.9	-2.7	276	26.0	25.8	-2.9			
7	316	3.0	2.1	-2.2	294	2.7	2.5	-1.1	264	8.5	8.5	0.9	263	16.1	16.0	2.0	264	32.0	31.8	3.3	265	35.4	35.3	3.2	270	23.6	23.6	-0.1			
8	311	3.0	2.3	-2.0	286	3.2	3.1	-0.9	266	7.9	7.9	0.6	265	17.5	17.4	1.4	265	26.4	26.3	2.3	253	32.9	31.5	9.6	269	24.9	24.9	0.3			
9	306	4.2	3.4	-2.5	289	4.0	3.8	-1.3	266	9.2	9.2	0.7	266	17.9	17.9	1.1	263	31.5	31.3	3.7	269	28.8	28.8	0.6	271	17.9	17.9	-0.4			
10	297	2.9	2.6	-1.3	273	4.4	4.4	-0.2	260	8.2	8.1	1.4	264	18.2	18.1	1.8	269	29.3	29.3	0.7	268	31.8	31.8	1.3	273	25.0	25.0	-1.2			
11	314	3.2	2.3	-2.2	295	3.1	2.8	-1.3	266	8.1	8.1	0.6	271	17.4	17.4	-0.4	272	28.5	28.5	-1.0	264	35.3	35.1	3.6	246	16.4	15.0	6.7			
12	294	4.3	3.9	-1.7	300	3.4	2.9	-1.7	265	7.4	7.4	0.6	277	16.1	16.0	-1.9	276	33.2	33.0	-3.4	275	30.4	30.3	-2.8	271	24.5	24.5	-0.3			
13	315	3.3	2.3	-2.3	304	2.2	1.8	-1.2	280	7.2	7.1	-1.2	277	15.9	15.8	-1.9	277	27.0	26.8	-3.2	274	32.3	32.2	-2.4	278	22.9	22.7	-3.2			
14	346	3.4	0.8	-3.3	308	2.8	2.2	-1.7	266	7.5	7.5	0.5	273	15.1	15.1	-0.9	273	26.0	26.0	-1.4	276	31.2	31.1	-3.0	279	20.6	20.4	-3.1			
15	290	1.2	1.1	-0.4	285	2.4	2.3	-0.6	269	7.0	7.0	0.1	270	14.4	14.4	-0.1	271	28.0	28.0	-0.7	271	31.5	31.5	-0.4	272	17.3	17.3	-0.7			
16	268	3.0	3.0	0.1	269	4.0	4.0	0.1	261	8.7	8.6	1.4	267	15.5	15.5	0.9	269	29.5	29.5	0.7	264	30.3	30.1	3.4	267	20.2	20.2	1.2			
17	279	4.4	4.3	-0.7	271	4.6	4.6	-0.1	269	10.4	10.4	0.1	262	16.6	16.5	2.2	267	26.7	26.7	1.4	263	32.5	32.2	4.2	265	15.1	15.0	1.4			
18	297	4.0	3.6	-1.8	285	5.0	4.8	-1.3	268	9.7	9.7	0.4	272	18.1	18.1	-0.6	265	28.6	28.5	2.7	257	34.7	33.8	7.7	265	25.5	25.4	2.2			
19	291	3.4	3.2	-1.2	276	3.8	3.8	-0.4	263	8.7	8.6	1.1	272	16.4	16.4	-0.6	264	28.9	28.7	3.2	260	31.2	30.7	5.6	256	16.2	15.7	3.9			
20	294	4.8	4.4	-2.0	280	4.7	4.6	-0.8	266	11.1	11.1	0.7	270	17.6	17.6	-0.1	270	32.4	32.4	0.0	268	34.0	34.0	1.3	262	24.9	24.7	3.5			
21	295	5.2	4.7	-2.2	293	5.2	4.8	-2.0	273	8.0	8.0	-0.4	273	15.3	15.3	-0.8	274	27.6	27.5	-2.0	271	33.6	33.6	-0.8	276	24.6	24.5	-2.7			
22	314	4.6	3.3	-3.2	292	4.1	3.8	-1.5	275	7.6	7.6	-0.7	271	15.2	15.2	-0.3	279	24.1	23.8	-3.8	270	31.2	31.2	0.0	274	23.7	23.6	-1.6			
23	331	3.5	1.7	-3.1	290	3.7	3.5	-1.3	272	8.4	8.4	-0.3	274	15.4	15.4	-1.1	272	26.0	26.0	-1.0	276	31.1	31.0	-3.0	268	21.2	21.2	0.7			
24	337	2.8	1.1	-2.6	279	4.3	4.2	-0.7	278	7.5	7.4	-1.1	277	14.9	14.8	-1.8	282	26.1	25.5	-5.6	279	30.8	30.4	-4.8	270	16.2	16.2	0.1			
25	302	2.5	2.1	-1.3	292	3.1	2.9	-1.2	280	7.6	7.5	-1.3	282	12.4	12.1	-2.5	284	20.4	19.8	-4.9	284	27.7	26.9	-6.7	286	20.1	19.4	-5.4			
26	333	2.8	1.3	-2.5	294	3.4	3.1	-1.4	286	6.3	6.1	-1.7	286	12.3	11.8	-3.3	290	21.8	20.5	-7.5	279	30.5	30.1	-4.8	299	17.1	14.9	-8.3			
27	299	3.5	3.1	-1.7	288	3.6	3.4	-1.1	272	5.3	5.3	-0.2	282	12.7	12.4	-2.6	282	21.8	21.4	-4.4	281	25.2	24.7	-4.8	268	24.0	24.0	0.9			
28	314	3.2	2.3	-2.2	283	3.6	3.5	-0.8	261	7.3	7.2	1.2	270	13.3	13.3	0.0	278	24.7	24.5	-3.3	271	28.3	28.3	-0.4	259	16.1	15.8	3.2			
29	288	4.5	4.3	-1.4	282	4.5	4.4	-0.9	268	7.7	7.7	0.3	271	13.0	13.0	-0.2	274	28.7	28.6	-2.2	264	29.4	29.2	3.2	264	19.2	19.1	2.1			
30	272	3.2	3.2	-0.1	284	3.6	3.5	-0.9	264	7.2	7.2	0.8	261	11.6	11.5	1.8	268	23.2	23.2	0.8	270	27.4	27.4	-0.2	277	22.8	22.6	-2.9			
31	307	4.3	3.4	-2.6	285	4.1	4.0	-1.1	267	6.8	6.8	0.4	270	11.5	11.5	0.0	268	23.8	23.8	0.9	269	25.5	25.5	0.4	279	18.7	18.5	-2.8			

Daily Normals of Upper Air Winds (1971-2000)

16

AHMEDABAD

APRIL

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	287	5.4	5.2	-1.6	271	3.9	3.9	-0.1	263	7.0	6.9	0.9	262	10.6	10.5	1.4	259	22.8	22.4	4.4	256	29.6	28.7	7.1	263	20.5	20.4	2.4			
2	276	3.1	3.1	-0.3	284	4.6	4.5	-1.1	262	8.2	8.1	1.2	260	13.5	13.3	2.4	263	24.3	24.1	2.9	265	29.6	29.5	2.4	249	18.7	17.5	6.6			
3	294	3.6	3.3	-1.5	282	4.7	4.6	-1.0	262	9.1	9.0	1.3	268	12.7	12.7	0.4	273	23.9	23.9	-1.3	271	27.5	27.5	-0.4	281	20.7	20.3	-3.9			
4	283	2.7	2.6	-0.6	278	4.5	4.5	-0.6	267	8.6	8.6	0.5	268	12.0	12.0	0.5	272	24.9	24.9	-0.8	266	31.7	31.6	2.0	268	20.8	20.8	0.8			
5	285	2.8	2.7	-0.7	274	4.3	4.3	-0.3	264	8.6	8.6	0.9	274	11.2	11.2	-0.8	277	24.8	24.6	-3.1	272	28.2	28.2	-1.0	282	21.3	20.8	-4.5			
6	308	3.9	3.1	-2.4	283	4.9	4.8	-1.1	268	7.0	7.0	0.3	271	13.0	13.0	-0.3	278	25.3	25.0	-3.7	269	31.6	31.6	0.4	268	18.3	18.3	0.6			
7	296	4.1	3.7	-1.8	283	4.6	4.5	-1.0	268	6.3	6.3	0.2	272	11.2	11.2	-0.3	274	24.8	24.7	-1.6	265	31.1	31.0	2.6	273	17.9	17.9	-0.8			
8	272	6.9	6.9	-0.3	269	6.1	6.1	0.1	258	9.5	9.3	2.0	270	12.6	12.6	0.1	272	25.2	25.2	-1.1	265	32.5	32.4	3.1	262	24.5	24.3	3.3			
9	270	4.4	4.4	0.0	268	5.4	5.4	0.2	275	8.4	8.4	-0.7	272	12.5	12.5	-0.5	273	23.5	23.5	-1.2	265	29.9	29.8	2.8	280	21.3	21.0	-3.6			
10	263	4.3	4.3	0.5	273	4.0	4.0	-0.2	257	6.8	6.6	1.5	272	11.7	11.7	-0.4	276	21.7	21.6	-2.4	277	26.8	26.6	-3.2	267	21.6	21.6	1.0			
11	277	4.7	4.7	-0.6	288	4.2	4.0	-1.3	274	6.9	6.9	-0.5	271	12.8	12.8	-0.3	269	24.4	24.4	0.3	272	31.9	31.9	-0.9	266	24.7	24.6	1.9			
12	263	4.2	4.2	0.5	275	4.4	4.4	-0.4	260	6.8	6.7	1.2	268	11.7	11.7	0.4	268	23.7	23.7	1.0	267	24.8	24.8	1.1	276	21.0	20.9	-2.1			
13	259	4.3	4.2	0.8	272	5.9	5.9	-0.2	263	9.2	9.1	1.1	262	12.2	12.1	1.8	266	25.6	25.5	2.0	268	30.9	30.9	1.2	281	22.2	21.8	-4.3			
14	268	3.5	3.5	0.1	270	5.2	5.2	0.0	260	9.5	9.4	1.6	264	12.7	12.6	1.3	273	22.4	22.4	-1.2	270	27.6	27.6	-0.2	262	18.8	18.6	2.7			
15	303	3.7	3.1	-2.0	275	5.5	5.5	-0.5	272	7.0	7.0	-0.2	271	9.3	9.3	-0.2	277	21.8	21.6	-2.7	274	27.2	27.1	-1.9	274	19.5	19.4	-1.5			
16	276	3.6	3.6	-0.4	275	3.4	3.4	-0.3	275	4.3	4.3	-0.4	280	9.8	9.7	-1.7	275	19.1	19.0	-1.7	272	25.6	25.6	-0.9	278	12.4	12.3	-1.8			
17	262	3.6	3.6	0.5	271	4.5	4.5	-0.1	268	5.9	5.9	0.2	274	10.3	10.3	-0.8	277	21.5	21.3	-2.8	270	27.4	27.4	-0.1	272	13.8	13.8	-0.6			
18	252	3.6	3.4	1.1	264	3.9	3.9	0.4	270	6.6	6.6	0.0	278	9.3	9.2	-1.3	272	20.9	20.9	-0.8	268	26.4	26.4	0.7	268	14.6	14.6	0.5			
19	257	4.5	4.4	1.0	277	4.3	4.3	-0.5	271	6.2	6.2	-0.1	272	9.5	9.5	-0.3	266	20.0	20.0	1.3	257	25.6	24.9	5.9	256	16.7	16.2	4.0			
20	268	5.6	5.6	0.2	276	4.9	4.9	-0.5	260	6.3	6.2	1.1	268	7.7	7.7	0.3	265	20.5	20.4	1.7	265	25.4	25.3	2.0	247	18.8	17.3	7.4			
21	265	5.6	5.6	0.5	271	5.7	5.7	-0.1	257	7.1	6.9	1.6	269	8.9	8.9	0.1	258	18.6	18.2	4.0	254	24.0	23.0	6.8	261	15.1	14.9	2.4			
22	273	5.2	5.2	-0.3	263	5.8	5.8	0.7	260	8.4	8.3	1.4	272	9.9	9.9	-0.4	273	19.0	19.0	-1.0	260	20.7	20.4	3.7	265	11.8	11.7	1.1			
23	271	5.6	5.6	-0.1	275	5.2	5.2	-0.5	272	6.7	6.7	-0.2	279	7.4	7.3	-1.1	272	17.5	17.5	-0.5	259	27.7	27.2	5.4	267	13.0	13.0	0.6			
24	287	4.8	4.6	-1.4	279	4.6	4.5	-0.7	275	5.7	5.7	-0.5	276	7.5	7.5	-0.8	277	15.3	15.2	-2.0	275	21.3	21.2	-2.0	279	10.7	10.6	-1.6			
25	272	5.5	5.5	-0.2	276	5.0	5.0	-0.5	280	5.3	5.2	-0.9	308	6.6	5.2	-4.1	293	15.4	14.2	-5.9	279	20.5	20.2	-3.3	275	8.2	8.2	-0.7			
26	272	3.2	3.2	-0.1	272	4.9	4.9	-0.2	273	6.2	6.2	-0.3	283	5.9	5.8	-1.3	271	17.2	17.2	-0.3	267	24.3	24.3	1.4	262	12.5	12.4	1.8			
27	269	4.8	4.8	0.1	268	5.4	5.4	0.2	257	5.8	5.7	1.3	273	6.0	6.0	-0.3	264	15.0	14.9	1.5	259	22.1	21.7	4.1	253	12.1	11.6	3.6			
28	279	3.9	3.9	-0.6	268	5.2	5.2	0.2	265	6.3	6.3	0.6	277	7.9	7.8	-0.9	270	15.0	15.0	0.1	258	19.8	19.4	4.0	274	12.2	12.2	-0.8			
29	265	5.0	5.0	0.4	261	5.1	5.0	0.8	259	6.8	6.7	1.3	271	7.1	7.1	-0.1	267	15.5	15.5	0.8	259	20.0	19.7	3.7	260	15.0	14.8	2.5			
30	258	5.9	5.8	1.2	263	6.2	6.1	0.8	261	7.4	7.3	1.2	265	7.6	7.6	0.6	267	19.4	19.4	0.9	260	25.4	25.0	4.5	273	11.6	11.6	-0.7			

Daily Normals of Upper Air Winds (1971-2000)

AHMEDABAD

MAY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	257	19.3	18.8	4.5	263	6.7	6.7	0.8	269	8.4	8.4	0.1	276	7.8	7.8	-0.8	263	19.2	19.1	2.2	265	19.7	19.6	1.7	268	12.5	12.5	0.5			
2	251	17.4	16.4	5.8	267	5.4	5.4	0.3	268	6.6	6.6	0.2	277	7.8	7.7	-1.0	275	17.0	16.9	-1.5	263	24.9	24.7	2.9	258	15.2	14.9	3.2			
3	278	16.1	15.9	-2.2	264	5.7	5.7	0.6	271	6.1	6.1	-0.1	269	7.5	7.5	0.1	273	15.5	15.5	-0.9	263	22.8	22.6	2.8	252	8.5	8.1	2.7			
4	277	5.9	5.9	-0.7	274	6.2	6.2	-0.4	260	6.3	6.2	1.1	278	7.5	7.4	-1.1	260	17.3	17.1	2.9	251	26.3	24.9	8.6	237	8.4	7.0	4.6			
5	276	3.6	3.6	-0.4	273	5.7	5.7	-0.3	270	5.8	5.8	0.0	276	7.0	7.0	-0.7	267	17.6	17.6	0.8	260	22.4	22.1	3.9	235	9.6	7.9	5.5			
6	280	3.5	3.4	-0.6	265	5.5	5.5	0.5	267	6.8	6.8	0.4	292	6.3	5.8	-2.4	281	13.3	13.0	-2.6	267	19.3	19.3	1.1	230	14.0	10.7	9.1			
7	274	3.1	3.1	-0.2	274	4.2	4.2	-0.3	273	6.6	6.6	-0.3	290	6.6	6.2	-2.3	275	18.3	18.2	-1.5	271	22.5	22.5	-0.4	263	10.6	10.5	1.2			
8	254	4.4	4.2	1.2	270	6.0	6.0	0.0	285	6.4	6.2	-1.7	297	6.8	6.1	-3.1	282	14.8	14.5	-3.2	281	19.4	19.0	-3.7	271	6.6	6.6	-0.1			
9	253	4.2	4.0	1.2	274	6.0	6.0	-0.4	274	6.0	6.0	-0.4	297	6.7	6.0	-3.0	283	14.3	13.9	-3.2	280	15.8	15.6	-2.7	282	7.5	7.3	-1.6			
10	266	4.1	4.1	0.3	266	5.7	5.7	0.4	278	5.1	5.1	-0.7	311	7.4	5.6	-4.8	283	15.0	14.6	-3.5	270	17.2	17.2	0.0	268	5.7	5.7	0.2			
11	248	4.3	4.0	1.6	262	4.9	4.8	0.7	297	4.2	3.8	-1.9	307	5.9	4.7	-3.6	273	11.6	11.6	-0.7	269	17.6	17.6	0.3	206	6.4	2.8	5.8			
12	256	4.1	4.0	1.0	266	4.5	4.5	0.3	276	3.8	3.8	-0.4	298	5.7	5.0	-2.7	273	11.9	11.9	-0.6	269	14.9	14.9	0.2	257	7.4	7.2	1.6			
13	260	4.7	4.6	0.8	264	5.5	5.5	0.6	260	6.4	6.3	1.1	284	4.9	4.7	-1.2	267	13.7	13.7	0.7	263	17.8	17.7	2.1	246	10.5	9.6	4.2			
14	261	3.8	3.8	0.6	259	5.7	5.6	1.1	263	3.5	3.5	0.4	286	4.3	4.1	-1.2	265	11.0	11.0	1.0	247	12.4	11.4	4.9	197	6.2	1.8	5.9			
15	237	4.8	4.0	2.6	265	5.0	5.0	0.4	253	4.2	4.0	1.2	265	3.4	3.4	0.3	258	15.5	15.2	3.2	251	19.4	18.4	6.2	222	6.6	4.4	4.9			
16	271	4.4	4.4	-0.1	269	5.0	5.0	0.1	259	6.0	5.9	1.1	306	3.7	3.0	-2.2	272	13.2	13.2	-0.5	250	17.4	16.4	5.9	230	6.2	4.8	4.0			
17	235	5.2	4.3	3.0	261	5.6	5.5	0.9	267	6.5	6.5	0.3	306	5.1	4.1	-3.0	277	12.3	12.2	-1.6	256	18.7	18.1	4.5	259	4.9	4.8	0.9			
18	233	5.9	4.7	3.6	263	6.7	6.7	0.8	279	5.5	5.4	-0.9	316	6.4	4.4	-4.6	290	9.4	8.8	-3.2	261	12.8	12.6	2.0	262	3.0	3.0	0.4			
19	210	15.9	8.0	13.7	256	7.0	6.8	1.7	280	5.9	5.8	-1.0	322	6.0	3.7	-4.7	290	9.7	9.1	-3.3	263	10.6	10.5	1.3	263	4.9	4.9	0.6			
20	203	4.6	1.8	4.2	262	6.5	6.4	0.9	290	4.4	4.1	-1.5	325	5.9	3.4	-4.8	299	10.7	9.3	-5.2	266	12.0	12.0	0.9	259	4.7	4.6	0.9			
21	223	5.3	3.6	3.9	263	6.9	6.9	0.8	288	4.5	4.3	-1.4	314	6.7	4.8	-4.7	285	9.8	9.5	-2.5	270	9.2	9.2	0.0	232	1.6	1.3	1.0			
22	265	7.1	7.1	0.6	259	6.6	6.5	1.3	270	4.9	4.9	0.0	323	6.4	3.9	-5.1	292	11.9	11.0	-4.5	272	10.9	10.9	-0.3	232	3.6	2.8	2.2			
23	256	7.5	7.3	1.8	261	7.2	7.1	1.1	280	5.5	5.4	-1.0	323	6.3	3.8	-5.0	294	8.0	7.3	-3.2	277	11.1	11.0	-1.3	217	2.6	1.6	2.1			
24	253	5.9	5.7	1.7	252	7.1	6.7	2.2	295	4.4	4.0	-1.9	336	5.4	2.2	-4.9	289	5.0	4.7	-1.6	257	7.7	7.5	1.7	131	4.4	-3.3	2.9			
25	259	5.1	5.0	1.0	265	5.7	5.7	0.5	287	5.3	5.1	-1.6	315	5.8	4.1	-4.1	295	4.7	4.2	-2.0	265	5.6	5.6	0.5	140	2.3	-1.5	1.8			
26	256	6.3	6.1	1.5	246	6.8	6.2	2.8	282	3.4	3.3	-0.7	329	4.9	2.5	-4.2	282	8.2	8.0	-1.7	264	7.0	7.0	0.7	127	1.0	-0.8	0.6			
27	253	5.6	5.4	1.6	264	6.3	6.3	0.7	292	4.6	4.3	-1.7	302	4.6	3.9	-2.4	274	6.4	6.4	-0.5	251	8.2	7.7	2.7	156	4.2	-1.7	3.8			
28	253	5.7	5.4	1.7	262	6.9	6.8	1.0	269	5.4	5.4	0.1	311	3.5	2.6	-2.3	261	9.6	9.5	1.5	254	9.2	8.9	2.5	126	0.9	-0.7	0.5			
29	253	5.5	5.3	1.6	259	6.8	6.7	1.3	279	5.0	4.9	-0.8	297	5.3	4.7	-2.4	262	10.9	10.8	1.6	251	12.3	11.6	4.1	145	1.2	-0.7	1.0			
30	237	4.6	3.9	2.5	249	6.5	6.1	2.3	278	5.7	5.6	-0.8	286	4.4	4.2	-1.2	267	9.1	9.1	0.5	260	8.9	8.8	1.5	148	5.8	-3.1	4.9			
31	267	6.2	6.2	0.3	255	5.9	5.7	1.5	273	3.8	3.8	-0.2	271	4.0	4.0	-0.1	272	9.3	9.3	-0.4	246	8.8	8.0	3.6	193	3.7	0.8	3.6			

Daily Normals of Upper Air Winds (1971-2000)

18

AHMEDABAD

JUNE

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	268	6.9	6.9	0.3	264	5.7	5.7	0.6	315	3.4	2.4	-2.4	310	3.8	2.9	-2.4	271	8.6	8.6	-0.1	234	8.7	7.1	5.1	125	2.9	-2.4	1.7			
2	273	7.8	7.8	-0.4	261	5.4	5.3	0.8	294	4.4	4.0	-1.8	347	5.3	1.2	-5.2	285	4.2	4.1	-1.1	243	5.6	5.0	2.6	105	4.9	-4.7	1.3			
3	264	6.4	6.4	0.7	248	4.3	4.0	1.6	304	2.7	2.2	-1.5	339	3.4	1.2	-3.2	269	4.1	4.1	0.1	255	5.4	5.2	1.4	134	4.5	-3.2	3.1			
4	263	5.6	5.6	0.7	266	5.6	5.6	0.4	322	3.3	2.0	-2.6	4	4.2	-0.3	-4.2	289	5.5	5.2	-1.8	258	6.6	6.5	1.4	133	4.9	-3.6	3.3			
5	269	7.3	7.3	0.1	261	5.0	4.9	0.8	323	2.5	1.5	-2.0	345	4.3	1.1	-4.2	271	4.8	4.8	-0.1	254	2.9	2.8	0.8	103	6.7	-6.5	1.5			
6	262	3.6	3.6	0.5	267	3.8	3.8	0.2	326	2.3	1.3	-1.9	328	3.6	1.9	-3.1	281	4.4	4.3	-0.8	235	4.2	3.4	2.4	99	9.6	-9.5	1.5			
7	244	5.7	5.1	2.5	248	5.2	4.8	1.9	304	2.5	2.1	-1.4	2	2.9	-0.1	-2.9	294	3.5	3.2	-1.4	244	4.6	4.1	2.0	116	8.1	-7.3	3.5			
8	233	5.4	4.3	3.2	228	6.3	4.7	4.2	264	1.9	1.9	0.2	305	2.9	2.4	-1.7	266	2.6	2.6	0.2	192	3.3	0.7	3.2	104	8.9	-8.6	2.2			
9	232	6.5	5.1	4.0	231	5.6	4.4	3.5	233	1.0	0.8	0.6	18	2.8	-0.9	-2.7	294	2.7	2.5	-1.1	353	1.7	0.2	-1.7	91	8.6	-8.6	0.1			
10	249	5.7	5.3	2.0	231	5.4	4.2	3.4	287	1.4	1.3	-0.4	322	1.8	1.1	-1.4	274	1.4	1.4	-0.1	76	0.8	-0.8	-0.2	92	9.9	-9.9	0.3			
11	236	5.9	4.9	3.3	240	6.4	5.6	3.2	286	2.2	2.1	-0.6	295	1.7	1.5	-0.7	264	1.0	1.0	0.1	86	3.1	-3.1	-0.2	89	11.8	-11.8	-0.2			
12	220	5.1	3.3	3.9	240	5.6	4.8	2.8	292	1.8	1.7	-0.7	333	1.1	0.5	-1.0	292	0.5	0.5	-0.2	122	3.6	-3.0	1.9	101	10.3	-10.1	2.0			
13	239	4.2	3.6	2.2	241	5.3	4.6	2.6	315	0.3	0.2	-0.2	43	4.9	-3.3	-3.6	10	1.1	-0.2	-1.1	117	1.8	-1.6	0.8	91	13.7	-13.7	0.3			
14	266	4.2	4.2	0.3	245	5.7	5.2	2.4	289	2.1	2.0	-0.7	45	1.6	-1.1	-1.1	53	1.5	-1.2	-0.9	103	3.2	-3.1	0.7	96	15.4	-15.3	1.5			
15	270	3.8	3.8	0.0	247	4.8	4.4	1.9	327	2.4	1.3	-2.0	49	1.8	-1.4	-1.2	58	2.8	-2.4	-1.5	97	5.8	-5.8	0.7	81	10.6	-10.5	-1.7			
16	236	3.4	2.8	1.9	251	4.6	4.4	1.5	344	1.5	0.4	-1.4	42	2.4	-1.6	-1.8	77	2.7	-2.6	-0.6	90	6.3	-6.3	0.0	90	11.7	-11.7	0.0			
17	222	4.2	2.8	3.1	243	5.1	4.5	2.3	343	1.7	0.5	-1.6	43	2.1	-1.4	-1.5	59	4.2	-3.6	-2.2	94	6.8	-6.8	0.5	94	14.3	-14.3	1.1			
18	229	4.3	3.2	2.8	230	6.1	4.7	3.9	292	0.5	0.5	-0.2	357	2.0	0.1	-2.0	62	3.2	-2.8	-1.5	92	5.1	-5.1	0.2	87	13.4	-13.4	-0.7			
19	224	5.6	3.9	4.0	237	6.3	5.3	3.4	297	1.1	1.0	-0.5	34	3.2	-1.8	-2.7	60	4.6	-4.0	-2.3	88	6.3	-6.3	-0.2	93	14.5	-14.5	0.8			
20	226	4.0	2.9	2.8	241	5.2	4.6	2.5	307	1.0	0.8	-0.6	34	3.0	-1.7	-2.5	47	2.2	-1.6	-1.5	90	3.7	-3.7	0.0	99	15.1	-14.9	2.3			
21	227	8.5	6.2	5.8	231	6.3	4.9	4.0	278	1.5	1.5	-0.2	18	1.9	-0.6	-1.8	101	3.8	-3.7	0.7	104	6.5	-6.3	1.6	88	15.4	-15.4	-0.6			
22	217	6.8	4.1	5.4	226	5.2	3.7	3.6	320	1.7	1.1	-1.3	335	1.7	0.7	-1.5	95	2.4	-2.4	0.2	96	9.0	-8.9	1.0	86	17.9	-17.9	-1.2			
23	224	5.5	3.8	4.0	234	4.8	3.9	2.8	352	1.5	0.2	-1.5	13	2.8	-0.6	-2.7	76	2.5	-2.4	-0.6	97	5.2	-5.2	0.6	91	14.7	-14.7	0.3			
24	240	6.0	5.2	3.0	238	5.2	4.4	2.8	7	1.7	-0.2	-1.7	44	2.8	-1.9	-2.0	92	3.6	-3.6	0.1	102	8.9	-8.7	1.9	94	16.5	-16.5	1.1			
25	224	6.1	4.2	4.4	241	6.0	5.3	2.9	322	1.1	0.7	-0.9	28	2.6	-1.2	-2.3	91	4.3	-4.3	0.1	104	7.6	-7.4	1.9	102	14.4	-14.1	3.1			
26	242	7.7	6.8	3.6	241	5.1	4.5	2.5	340	1.5	0.5	-1.4	66	3.9	-3.6	-1.6	91	6.8	-6.8	0.1	101	11.0	-10.8	2.1	102	19.8	-19.4	4.2			
27	221	5.5	3.6	4.2	233	4.4	3.5	2.6	17	1.4	-0.4	-1.3	69	3.9	-3.6	-1.4	83	7.9	-7.8	-1.0	90	12.0	-12.0	-0.1	83	20.6	-20.5	-2.4			
28	241	4.8	4.2	2.3	240	5.9	5.1	2.9	256	0.8	0.8	0.2	57	3.7	-3.1	-2.0	78	6.3	-6.2	-1.3	90	12.2	-12.2	-0.1	83	22.3	-22.1	-2.7			
29	228	6.4	4.8	4.3	235	6.3	5.2	3.6	320	2.6	1.7	-2.0	37	1.5	-0.9	-1.2	79	4.1	-4.0	-0.8	88	12.0	-12.0	-0.5	68	20.0	-18.5	-7.6			
30	236	7.5	6.2	4.2	245	6.1	5.5	2.6	306	3.2	2.6	-1.9	69	1.9	-1.8	-0.7	97	5.4	-5.4	0.7	91	11.0	-11.0	0.1	88	22.3	-22.3	-0.6			

Daily Normals of Upper Air Winds (1971-2000)

AHMEDABAD

JULY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	221	5.7	3.8	4.3	232	6.6	5.2	4.0	286	3.2	3.1	-0.9	34	1.8	-1.0	-1.5	97	4.6	-4.6	0.6	95	8.3	-8.3	0.7	76	17.2	-16.7	-4.1			
2	206	6.6	2.9	5.9	239	7.1	6.1	3.6	262	3.5	3.5	0.5	36	1.4	-0.8	-1.1	85	6.4	-6.4	-0.6	95	12.1	-12.1	1.1	88	21.4	-21.4	-0.6			
3	225	5.8	4.1	4.1	243	6.2	5.5	2.8	270	2.8	2.8	0.0	24	1.2	-0.5	-1.1	79	4.6	-4.5	-0.9	97	9.0	-8.9	1.1	79	18.9	-18.6	-3.5			
4	214	4.8	2.7	4.0	243	6.2	5.5	2.8	259	4.7	4.6	0.9	14	0.8	-0.2	-0.8	87	6.1	-6.1	-0.3	79	11.7	-11.5	-2.3	86	20.5	-20.4	-1.6			
5	221	4.8	3.1	3.6	245	6.3	5.7	2.7	283	3.2	3.1	-0.7	7	2.6	-0.3	-2.6	96	4.4	-4.4	0.5	102	11.6	-11.4	2.4	90	19.7	-19.7	0.1			
6	239	6.9	5.9	3.6	243	7.4	6.6	3.3	304	3.2	2.7	-1.8	10	2.2	-0.4	-2.2	68	5.9	-5.5	-2.2	88	13.4	-13.4	-0.4	79	19.8	-19.5	-3.7			
7	239	6.1	5.2	3.1	240	5.6	4.9	2.8	311	1.1	0.8	-0.7	48	3.1	-2.3	-2.1	73	8.1	-7.7	-2.4	97	13.3	-13.2	1.6	90	22.5	-22.5	-0.1			
8	231	3.5	2.7	2.2	238	6.4	5.4	3.4	306	3.7	3.0	-2.2	51	2.2	-1.7	-1.4	86	6.1	-6.1	-0.4	103	11.8	-11.5	2.6	89	20.4	-20.4	-0.4			
9	229	6.8	5.1	4.5	249	6.4	6.0	2.3	295	1.7	1.5	-0.7	56	3.2	-2.7	-1.8	83	4.9	-4.9	-0.6	97	13.4	-13.3	1.6	86	20.9	-20.9	-1.3			
10	235	5.8	4.8	3.3	234	5.8	4.7	3.4	265	2.1	2.1	0.2	49	3.2	-2.4	-2.1	86	7.6	-7.6	-0.5	82	11.6	-11.5	-1.7	75	24.7	-23.9	-6.3			
11	214	6.5	3.7	5.4	247	6.4	5.9	2.5	320	3.0	1.9	-2.3	22	2.4	-0.9	-2.2	74	6.6	-6.3	-1.8	81	12.7	-12.6	-1.9	95	25.6	-25.5	2.4			
12	216	5.6	3.3	4.5	243	7.1	6.3	3.2	286	3.6	3.5	-1.0	11	3.1	-0.6	-3.0	95	7.4	-7.4	0.6	92	15.4	-15.4	0.5	86	20.7	-20.7	-1.4			
13	248	5.1	4.7	1.9	249	7.1	6.6	2.5	305	3.5	2.9	-2.0	68	1.6	-1.5	-0.6	89	4.1	-4.1	-0.1	91	9.4	-9.4	0.1	92	20.3	-20.3	0.7			
14	235	6.0	4.9	3.4	245	6.5	5.9	2.8	270	2.4	2.4	0.0	325	1.6	0.9	-1.3	91	7.1	-7.1	0.1	97	12.6	-12.5	1.6	88	25.7	-25.7	-1.0			
15	241	7.9	6.9	3.9	242	6.2	5.5	2.9	275	3.3	3.3	-0.3	326	0.7	0.4	-0.6	82	6.6	-6.5	-0.9	92	13.6	-13.6	0.4	92	22.2	-22.2	0.8			
16	248	6.9	6.4	2.6	249	7.3	6.8	2.6	301	3.3	2.8	-1.7	73	1.0	-1.0	-0.3	95	7.5	-7.5	0.6	100	12.7	-12.5	2.1	89	25.7	-25.7	-0.6			
17	226	6.6	4.8	4.6	238	6.4	5.4	3.4	274	3.0	3.0	-0.2	207	0.2	0.1	0.2	88	6.3	-6.3	-0.2	96	13.4	-13.3	1.3	90	25.0	-25.0	0.2			
18	217	6.0	3.6	4.8	234	8.2	6.6	4.8	303	3.0	2.5	-1.6	347	1.8	0.4	-1.8	78	4.9	-4.8	-1.0	91	12.5	-12.5	0.2	95	22.1	-22.0	1.9			
19	237	6.4	5.4	3.5	248	6.3	5.8	2.4	260	3.5	3.4	0.6	127	1.0	-0.8	0.6	83	7.7	-7.6	-0.9	91	15.0	-15.0	0.2	91	25.5	-25.5	0.6			
20	225	5.7	4.0	4.0	247	7.5	6.9	3.0	280	3.5	3.4	-0.6	346	1.2	0.3	-1.2	77	6.9	-6.7	-1.6	89	13.9	-13.9	-0.2	88	26.4	-26.4	-0.8			
21	240	7.5	6.5	3.8	248	7.2	6.7	2.7	269	4.3	4.3	0.1	53	0.5	-0.4	-0.3	85	8.6	-8.6	-0.7	84	16.4	-16.3	-1.8	90	23.9	-23.9	0.2			
22	240	5.3	4.6	2.7	251	5.9	5.6	1.9	263	3.1	3.1	0.4	52	2.3	-1.8	-1.4	83	9.9	-9.8	-1.2	95	15.8	-15.7	1.3	88	23.0	-23.0	-0.9			
23	257	5.8	5.7	1.3	250	6.3	5.9	2.2	273	5.4	5.4	-0.3	344	1.8	0.5	-1.7	88	8.0	-8.0	-0.3	87	13.7	-13.7	-0.8	86	23.9	-23.8	-1.6			
24	265	6.7	6.7	0.6	262	6.4	6.3	0.9	299	3.1	2.7	-1.5	36	2.9	-1.7	-2.3	92	7.1	-7.1	0.2	93	15.5	-15.5	0.8	89	28.2	-28.2	-0.4			
25	260	7.9	7.8	1.4	252	8.9	8.5	2.7	275	6.4	6.4	-0.6	357	2.2	0.1	-2.2	80	5.8	-5.7	-1.0	82	15.7	-15.5	-2.3	89	26.8	-26.8	-0.7			
26	258	7.5	7.3	1.6	252	7.6	7.2	2.4	288	4.6	4.4	-1.4	6	1.8	-0.2	-1.8	98	7.1	-7.0	1.0	91	13.0	-13.0	0.3	86	28.6	-28.5	-2.0			
27	263	8.5	8.4	1.1	257	8.6	8.4	1.9	274	5.2	5.2	-0.4	306	1.9	1.5	-1.1	82	7.2	-7.1	-1.0	93	15.9	-15.9	0.7	89	26.7	-26.7	-0.6			
28	251	9.9	9.4	3.2	255	8.8	8.5	2.2	277	4.8	4.8	-0.6	351	2.4	0.4	-2.4	90	7.6	-7.6	0.0	92	14.4	-14.4	0.4	92	26.3	-26.3	0.9			
29	258	5.2	5.1	1.1	252	7.6	7.2	2.3	281	3.2	3.1	-0.6	360	1.4	0.0	-1.4	89	7.7	-7.7	-0.2	90	16.0	-16.0	0.1	90	28.1	-28.1	0.1			
30	260	4.7	4.6	0.8	262	6.1	6.0	0.8	311	4.0	3.0	-2.6	48	3.8	-2.8	-2.5	90	8.0	-8.0	0.0	91	15.4	-15.4	0.4	93	27.7	-27.7	1.6			
31	236	5.9	4.9	3.3	262	6.1	6.0	0.8	309	5.1	4.0	-3.2	28	3.0	-1.4	-2.6	98	9.7	-9.6	1.4	88	15.3	-15.3	-0.5	92	26.1	-26.1	0.9			

Daily Normals of Upper Air Winds (1971-2000)

AHMEDABAD

AUGUST

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	251	7.7	7.3	2.5	258	6.6	6.4	1.4	303	3.5	2.9	-1.9	32	2.8	-1.5	-2.4	82	8.2	-8.1	-1.2	94	16.3	-16.3	1.2	92	29.1	-29.1	1.1			
2	259	7.4	7.3	1.4	253	6.3	6.0	1.8	293	3.0	2.8	-1.2	11	2.1	-0.4	-2.1	74	7.3	-7.0	-2.0	91	16.4	-16.4	0.4	94	26.4	-26.3	1.7			
3	257	5.5	5.4	1.2	251	5.5	5.2	1.8	280	3.4	3.3	-0.6	3	2.2	-0.1	-2.2	89	9.4	-9.4	-0.1	84	13.8	-13.7	-1.4	80	19.5	-19.2	-3.3			
4	245	6.0	5.4	2.5	251	7.0	6.6	2.3	281	3.2	3.1	-0.6	47	2.5	-1.8	-1.7	86	6.4	-6.4	-0.4	85	13.8	-13.7	-1.2	83	26.3	-26.1	-3.0			
5	255	5.9	5.7	1.5	250	7.3	6.9	2.5	289	4.3	4.1	-1.4	334	2.5	1.1	-2.3	88	7.4	-7.4	-0.2	92	12.1	-12.1	0.5	86	20.8	-20.7	-1.6			
6	261	6.3	6.2	1.0	257	7.5	7.3	1.7	289	4.0	3.8	-1.3	347	2.2	0.5	-2.1	89	6.1	-6.1	-0.1	93	16.9	-16.9	0.9	94	21.4	-21.4	1.4			
7	259	6.6	6.5	1.3	252	8.3	7.9	2.5	303	3.3	2.8	-1.8	9	1.8	-0.3	-1.8	82	7.4	-7.3	-1.0	97	15.8	-15.7	1.8	90	23.8	-23.8	-0.1			
8	249	5.9	5.5	2.1	244	6.1	5.5	2.7	298	3.6	3.2	-1.7	15	2.3	-0.6	-2.2	89	8.8	-8.8	-0.1	86	16.4	-16.4	-1.2	92	20.1	-20.1	0.7			
9	241	5.7	5.0	2.8	260	5.5	5.4	1.0	323	2.0	1.2	-1.6	52	3.7	-2.9	-2.3	89	9.7	-9.7	-0.2	89	14.2	-14.2	-0.2	82	20.5	-20.3	-2.8			
10	252	2.8	2.7	0.9	261	6.1	6.0	1.0	322	1.8	1.1	-1.4	52	3.4	-2.7	-2.1	80	8.2	-8.1	-1.4	87	16.4	-16.4	-0.9	81	26.6	-26.3	-4.1			
11	255	3.9	3.8	1.0	258	5.6	5.5	1.2	283	2.2	2.1	-0.5	65	2.3	-2.1	-1.0	89	7.5	-7.5	-0.1	89	12.9	-12.9	-0.3	84	20.4	-20.3	-2.3			
12	240	5.6	4.9	2.8	248	7.3	6.8	2.7	250	3.5	3.3	1.2	308	1.1	0.9	-0.7	80	5.7	-5.6	-1.0	92	9.7	-9.7	0.4	81	26.0	-25.7	-3.9			
13	233	6.1	4.9	3.7	249	6.8	6.4	2.4	297	3.1	2.8	-1.4	348	2.5	0.5	-2.4	81	5.9	-5.8	-0.9	91	11.8	-11.8	0.3	84	20.6	-20.5	-2.3			
14	246	7.0	6.4	2.9	248	7.0	6.5	2.6	302	3.6	3.0	-1.9	358	2.7	0.1	-2.7	77	6.9	-6.7	-1.5	86	13.1	-13.1	-0.9	84	20.5	-20.4	-2.2			
15	244	5.7	5.1	2.5	255	6.6	6.4	1.7	312	4.3	3.2	-2.9	345	3.0	0.8	-2.9	88	9.2	-9.2	-0.3	89	13.8	-13.8	-0.2	82	21.5	-21.3	-2.9			
16	238	5.3	4.5	2.8	267	5.8	5.8	0.3	310	2.5	1.9	-1.6	63	2.2	-2.0	-1.0	72	6.3	-6.0	-2.0	80	13.7	-13.5	-2.4	88	24.1	-24.1	-0.7			
17	249	5.7	5.3	2.0	257	7.6	7.4	1.7	285	2.8	2.7	-0.7	5	1.2	-0.1	-1.2	82	7.4	-7.3	-1.0	89	16.4	-16.4	-0.4	78	23.7	-23.2	-4.8			
18	243	5.1	4.5	2.3	261	5.9	5.8	0.9	275	2.4	2.4	-0.2	328	1.3	0.7	-1.1	83	6.4	-6.3	-0.8	96	14.3	-14.2	1.5	91	22.5	-22.5	0.2			
19	260	5.9	5.8	1.0	266	6.2	6.2	0.4	302	4.1	3.5	-2.2	356	1.5	0.1	-1.5	68	7.0	-6.5	-2.6	95	15.8	-15.7	1.5	96	22.1	-22.0	2.3			
20	244	4.8	4.3	2.1	258	7.0	6.8	1.5	306	2.6	2.1	-1.5	41	3.2	-2.1	-2.4	89	7.6	-7.6	-0.1	90	12.4	-12.4	0.1	91	22.7	-22.7	0.4			
21	241	3.8	3.3	1.8	261	6.0	5.9	0.9	283	3.2	3.1	-0.7	20	1.5	-0.5	-1.4	82	7.5	-7.4	-1.0	91	13.2	-13.2	0.2	99	25.2	-24.9	3.8			
22	311	1.1	0.8	-0.7	262	4.4	4.4	0.6	322	1.1	0.7	-0.9	34	1.4	-0.8	-1.2	86	7.5	-7.5	-0.5	94	15.5	-15.5	1.0	85	24.4	-24.3	-2.0			
23	259	2.6	2.6	0.5	265	5.8	5.8	0.5	338	2.2	0.8	-2.0	45	0.8	-0.6	-0.6	87	8.4	-8.4	-0.5	92	14.7	-14.7	0.6	88	21.9	-21.9	-0.7			
24	253	1.7	1.6	0.5	260	4.7	4.6	0.8	319	0.9	0.6	-0.7	351	1.2	0.2	-1.2	85	6.6	-6.6	-0.6	91	12.7	-12.7	0.3	84	23.9	-23.8	-2.3			
25	270	2.7	2.7	0.0	267	5.9	5.9	0.3	299	2.3	2.0	-1.1	352	1.5	0.2	-1.5	91	5.4	-5.4	0.1	95	12.0	-11.9	1.1	90	20.8	-20.8	0.0			
26	255	4.2	4.1	1.1	259	5.2	5.1	1.0	297	2.5	2.2	-1.1	338	2.7	1.0	-2.5	80	6.5	-6.4	-1.1	97	13.3	-13.2	1.7	88	19.2	-19.2	-0.8			
27	270	3.3	3.3	0.0	269	4.6	4.6	0.1	307	3.5	2.8	-2.1	12	2.5	-0.5	-2.4	79	4.9	-4.8	-0.9	99	12.3	-12.1	2.0	89	17.5	-17.5	-0.3			
28	245	3.5	3.2	1.5	266	4.9	4.9	0.3	333	3.8	1.7	-3.4	6	3.1	-0.3	-3.1	81	6.8	-6.7	-1.1	94	11.5	-11.5	0.9	87	21.4	-21.4	-1.1			
29	256	5.5	5.3	1.3	278	4.1	4.1	-0.6	338	2.9	1.1	-2.7	10	2.7	-0.5	-2.7	82	7.2	-7.1	-1.0	94	12.6	-12.6	0.9	93	19.4	-19.4	1.0			
30	277	5.5	5.5	-0.7	269	4.4	4.4	0.1	332	3.0	1.4	-2.6	57	2.7	-2.3	-1.5	87	6.6	-6.6	-0.4	92	10.9	-10.9	0.3	84	17.1	-17.0	-1.9			
31	273	1.9	1.9	-0.1	275	5.5	5.5	-0.5	342	1.6	0.5	-1.5	360	2.3	0.0	-2.3	95	6.9	-6.9	0.6	92	10.3	-10.3	0.3	91	15.6	-15.6	0.2			

Daily Normals of Upper Air Winds (1971-2000)

AHMEDABAD

SEPTEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	299	1.8	1.6	-0.9	271	5.2	5.2	-0.1	327	2.0	1.1	-1.7	18	2.0	-0.6	-1.9	103	5.0	-4.9	1.1	100	11.0	-10.8	2.0	90	16.7	-16.7	-0.1			
2	276	2.9	2.9	-0.3	269	4.4	4.4	0.1	360	1.1	0.0	-1.1	66	2.4	-2.2	-1.0	92	7.6	-7.6	0.2	104	10.2	-9.9	2.4	85	19.7	-19.6	-1.8			
3	237	4.3	3.6	2.3	254	4.8	4.6	1.3	299	2.3	2.0	-1.1	9	1.3	-0.2	-1.3	83	6.4	-6.4	-0.8	86	11.0	-11.0	-0.7	84	19.1	-19.0	-1.9			
4	272	3.5	3.5	-0.1	245	5.1	4.6	2.1	308	2.3	1.8	-1.4	270	1.0	1.0	0.0	76	3.8	-3.7	-0.9	90	9.0	-9.0	0.0	75	15.2	-14.7	-3.9			
5	268	3.6	3.6	0.1	242	5.7	5.0	2.7	300	1.6	1.4	-0.8	345	1.1	0.3	-1.1	114	3.5	-3.2	1.4	98	9.2	-9.1	1.2	88	15.2	-15.2	-0.5			
6	281	5.9	5.8	-1.1	259	5.3	5.2	1.0	259	2.1	2.1	0.4	326	1.4	0.8	-1.2	89	4.0	-4.0	-0.1	100	11.7	-11.5	2.1	91	13.9	-13.9	0.3			
7	231	4.3	3.3	2.7	252	5.2	5.0	1.6	261	1.2	1.2	0.2	318	1.5	1.0	-1.1	67	4.0	-3.7	-1.6	84	8.8	-8.8	-0.9	91	16.7	-16.7	0.3			
8	249	5.0	4.7	1.8	261	6.0	5.9	0.9	278	2.1	2.1	-0.3	29	1.0	-0.5	-0.9	81	3.7	-3.7	-0.6	93	7.7	-7.7	0.4	88	13.0	-13.0	-0.5			
9	247	5.3	4.9	2.1	260	4.5	4.4	0.8	311	1.1	0.8	-0.7	315	1.0	0.7	-0.7	62	3.0	-2.6	-1.4	116	3.9	-3.5	1.7	91	12.9	-12.9	0.3			
10	245	4.7	4.2	2.0	263	3.4	3.4	0.4	305	1.2	1.0	-0.7	281	1.0	1.0	-0.2	123	4.4	-3.7	2.4	121	6.3	-5.4	3.2	94	13.9	-13.9	0.9			
11	248	3.2	3.0	1.2	268	3.7	3.7	0.1	308	1.8	1.4	-1.1	299	1.0	0.9	-0.5	85	3.7	-3.7	-0.3	115	5.6	-5.1	2.4	101	17.1	-16.8	3.2			
12	248	3.5	3.3	1.3	264	3.6	3.6	0.4	288	1.6	1.5	-0.5	267	2.0	2.0	0.1	110	2.0	-1.9	0.7	120	5.6	-4.9	2.8	97	14.1	-14.0	1.7			
13	261	3.9	3.9	0.6	269	4.1	4.1	0.1	11	1.0	-0.2	-1.0	328	1.3	0.7	-1.1	113	3.4	-3.1	1.3	114	4.8	-4.4	2.0	95	13.8	-13.8	1.1			
14	289	6.1	5.8	-2.0	267	4.3	4.3	0.2	297	1.3	1.2	-0.6	280	2.2	2.2	-0.4	114	1.2	-1.1	0.5	99	4.9	-4.8	0.8	88	11.7	-11.7	-0.4			
15	292	5.3	4.9	-2.0	276	4.0	4.0	-0.4	322	1.1	0.7	-0.9	297	3.0	2.7	-1.4	129	2.6	-2.0	1.6	123	7.2	-6.0	3.9	92	9.2	-9.2	0.4			
16	300	4.0	3.5	-2.0	281	3.8	3.7	-0.7	321	1.3	0.8	-1.0	299	1.3	1.1	-0.6	139	1.1	-0.7	0.8	123	4.4	-3.7	2.4	100	9.9	-9.8	1.7			
17	275	4.2	4.2	-0.4	268	3.4	3.4	0.1	259	1.0	1.0	0.2	262	2.2	2.2	0.3	194	0.4	0.1	0.4	134	4.3	-3.1	3.0	99	10.5	-10.4	1.7			
18	256	4.6	4.5	1.1	270	3.7	3.7	0.0	284	2.1	2.0	-0.5	259	3.1	3.0	0.6	191	1.6	0.3	1.6	148	4.1	-2.2	3.5	105	9.0	-8.7	2.3			
19	261	4.5	4.4	0.7	280	2.9	2.9	-0.5	214	0.7	0.4	0.6	248	2.2	2.0	0.8	191	3.1	0.6	3.0	173	3.4	-0.4	3.4	106	10.0	-9.6	2.7			
20	258	2.9	2.8	0.6	312	1.3	1.0	-0.9	33	1.7	-0.9	-1.4	270	0.9	0.9	0.0	197	2.7	0.8	2.6	181	4.8	0.1	4.8	110	7.9	-7.4	2.7			
21	257	2.3	2.2	0.5	319	2.0	1.3	-1.5	33	2.4	-1.3	-2.0	326	0.4	0.2	-0.3	198	3.2	1.0	3.0	177	3.6	-0.2	3.6	114	8.5	-7.8	3.4			
22	305	1.6	1.3	-0.9	327	2.0	1.1	-1.7	28	2.7	-1.3	-2.4	270	0.9	0.9	0.0	203	3.4	1.3	3.1	162	4.6	-1.4	4.4	113	7.6	-7.0	3.0			
23	312	2.5	1.9	-1.7	298	1.9	1.7	-0.9	354	1.0	0.1	-1.0	304	1.8	1.5	-1.0	241	4.3	3.8	2.1	204	5.6	2.3	5.1	116	7.9	-7.1	3.5			
24	301	1.2	1.0	-0.6	309	2.1	1.6	-1.3	27	0.7	-0.3	-0.6	299	1.0	0.9	-0.5	225	2.0	1.4	1.4	201	2.8	1.0	2.6	109	7.8	-7.4	2.5			
25	305	1.9	1.6	-1.1	315	1.8	1.3	-1.3	43	2.1	-1.4	-1.5	277	0.8	0.8	-0.1	256	3.8	3.7	0.9	198	3.6	1.1	3.4	81	5.4	-5.3	-0.8			
26	302	1.9	1.6	-1.0	326	1.1	0.6	-0.9	360	0.4	0.0	-0.4	291	2.2	2.1	-0.8	252	3.9	3.7	1.2	225	3.5	2.5	2.5	94	6.4	-6.4	0.4			
27	323	0.5	0.3	-0.4	302	1.3	1.1	-0.7	7	0.8	-0.1	-0.8	274	1.3	1.3	-0.1	257	5.8	5.7	1.3	223	4.8	3.3	3.5	95	4.6	-4.6	0.4			
28	281	1.0	1.0	-0.2	317	2.5	1.7	-1.8	339	2.6	0.9	-2.4	297	2.5	2.2	-1.1	239	4.2	3.6	2.2	236	5.0	4.1	2.8	125	4.4	-3.6	2.5			
29	21	0.9	-0.3	-0.8	326	1.4	0.8	-1.2	29	1.3	-0.6	-1.1	275	3.5	3.5	-0.3	258	5.3	5.2	1.1	237	5.6	4.7	3.0	127	4.4	-3.5	2.6			
30	16	0.7	-0.2	-0.7	328	1.5	0.8	-1.3	36	2.4	-1.4	-1.9	265	2.5	2.5	0.2	235	4.0	3.3	2.3	223	5.2	3.6	3.8	143	5.9	-3.6	4.7			

Daily Normals of Upper Air Winds (1971-2000)

AHMEDABAD

OCTOBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	9	1.3	-0.2	-1.3	311	1.1	0.8	-0.7	284	0.4	0.4	-0.1	273	3.3	3.3	-0.2	265	5.3	5.3	0.5	236	6.5	5.4	3.7	159	3.1	-1.1	2.9			
2	15	2.0	-0.5	-1.9	351	1.3	0.2	-1.3	326	1.1	0.6	-0.9	333	1.3	0.6	-1.2	259	5.6	5.5	1.1	238	6.2	5.3	3.3	130	3.5	-2.7	2.3			
3	243	0.2	0.2	0.1	331	1.0	0.5	-0.9	354	1.8	0.2	-1.8	314	3.7	2.7	-2.6	258	6.3	6.2	1.3	235	8.6	7.1	4.9	124	7.7	-6.4	4.3			
4	193	1.3	0.3	1.3	335	1.9	0.8	-1.7	357	1.8	0.1	-1.8	344	3.7	1.0	-3.6	249	7.2	6.7	2.6	224	7.1	4.9	5.1	139	5.8	-3.8	4.4			
5	302	2.2	1.9	-1.2	319	2.1	1.4	-1.6	349	2.0	0.4	-2.0	337	2.1	0.8	-1.9	245	4.7	4.2	2.0	232	4.3	3.4	2.7	139	6.8	-4.5	5.1			
6	315	1.1	0.8	-0.8	338	1.8	0.7	-1.7	15	2.4	-0.6	-2.3	335	3.8	1.6	-3.4	263	5.2	5.2	0.6	236	7.9	6.6	4.4	160	3.8	-1.3	3.6			
7	28	2.7	-1.3	-2.4	9	1.8	-0.3	-1.8	3	2.0	-0.1	-2.0	295	3.8	3.4	-1.6	260	6.6	6.5	1.2	229	8.2	6.2	5.4	204	6.8	2.7	6.2			
8	51	2.7	-2.1	-1.7	357	1.7	0.1	-1.7	10	2.3	-0.4	-2.3	309	2.7	2.1	-1.7	249	8.3	7.7	3.0	245	9.5	8.6	4.1	203	5.2	2.0	4.8			
9	28	4.9	-2.3	-4.3	349	2.1	0.4	-2.1	23	2.5	-1.0	-2.3	308	3.1	2.4	-1.9	273	7.9	7.9	-0.4	248	11.9	11.1	4.4	210	4.2	2.1	3.6			
10	20	3.2	-1.1	-3.0	340	2.0	0.7	-1.9	341	2.1	0.7	-2.0	320	3.3	2.1	-2.5	270	7.8	7.8	0.0	246	10.7	9.8	4.3	218	5.1	3.1	4.0			
11	25	1.9	-0.8	-1.7	342	1.9	0.6	-1.8	315	2.8	2.0	-2.0	276	4.4	4.4	-0.5	267	10.2	10.2	0.6	253	12.5	12.0	3.6	222	6.1	4.1	4.5			
12	43	2.2	-1.5	-1.6	325	2.4	1.4	-2.0	319	2.0	1.3	-1.5	275	3.5	3.5	-0.3	267	8.3	8.3	0.5	241	11.1	9.7	5.4	121	4.1	-3.5	2.1			
13	98	1.5	-1.5	0.2	307	1.5	1.2	-0.9	356	1.3	0.1	-1.3	292	5.8	5.4	-2.2	272	11.1	11.1	-0.3	265	13.5	13.4	1.2	243	4.6	4.1	2.1			
14	70	1.5	-1.4	-0.5	328	1.5	0.8	-1.3	338	1.6	0.6	-1.5	286	5.4	5.2	-1.5	259	10.9	10.7	2.1	247	12.8	11.8	4.9	252	4.5	4.3	1.4			
15	70	1.5	-1.4	-0.5	311	1.1	0.8	-0.7	353	1.6	0.2	-1.6	296	5.5	4.9	-2.4	270	11.3	11.3	0.0	253	14.8	14.2	4.3	187	3.1	0.4	3.1			
16	150	0.8	-0.4	0.7	337	0.8	0.3	-0.7	350	1.1	0.2	-1.1	301	4.8	4.1	-2.5	264	10.3	10.3	1.0	248	13.9	12.9	5.2	208	3.8	1.8	3.4			
17	4	1.3	-0.1	-1.3	360	1.9	0.0	-1.9	19	1.8	-0.6	-1.7	286	4.6	4.4	-1.3	266	12.4	12.4	0.9	248	15.7	14.6	5.9	214	5.5	3.1	4.6			
18	10	2.3	-0.4	-2.3	12	1.9	-0.4	-1.9	360	2.0	0.0	-2.0	294	4.8	4.4	-2.0	265	12.2	12.2	1.0	251	13.9	13.1	4.5	218	5.1	3.1	4.0			
19	30	0.8	-0.4	-0.7	5	1.1	-0.1	-1.1	346	0.4	0.1	-0.4	300	6.4	5.6	-3.2	262	13.7	13.6	1.8	253	17.7	16.9	5.2	232	5.1	4.0	3.1			
20	4	1.6	-0.1	-1.6	343	1.0	0.3	-1.0	22	1.6	-0.6	-1.5	304	5.0	4.1	-2.8	265	13.7	13.6	1.3	264	18.3	18.2	1.9	237	4.8	4.0	2.6			
21	360	2.0	0.0	-2.0	54	1.4	-1.1	-0.8	56	0.4	-0.3	-0.2	278	4.9	4.9	-0.7	267	13.3	13.3	0.6	261	16.1	15.9	2.4	249	6.6	6.1	2.4			
22	28	1.7	-0.8	-1.5	56	1.1	-0.9	-0.6	281	1.6	1.6	-0.3	263	6.3	6.2	0.8	266	13.5	13.5	0.9	254	16.7	16.1	4.5	196	6.9	1.9	6.6			
23	45	1.4	-1.0	-1.0	355	1.1	0.1	-1.1	299	2.1	1.8	-1.0	289	7.0	6.6	-2.3	273	17.4	17.4	-0.8	255	20.7	20.0	5.3	244	7.6	6.9	3.3			
24	68	1.1	-1.0	-0.4	37	1.0	-0.6	-0.8	360	1.0	0.0	-1.0	273	7.8	7.8	-0.4	261	16.6	16.4	2.7	252	21.9	20.9	6.7	253	10.6	10.1	3.1			
25	67	2.6	-2.4	-1.0	56	2.2	-1.8	-1.2	11	1.5	-0.3	-1.5	277	6.4	6.4	-0.8	264	20.5	20.4	2.1	255	21.9	21.2	5.5	265	11.5	11.5	1.0			
26	49	2.8	-2.1	-1.8	39	1.9	-1.2	-1.5	25	1.7	-0.7	-1.5	285	7.3	7.0	-1.9	270	16.9	16.9	-0.1	252	22.2	21.1	6.8	275	8.4	8.4	-0.7			
27	48	3.1	-2.3	-2.1	43	2.6	-1.8	-1.9	355	2.1	0.2	-2.1	283	5.9	5.8	-1.3	266	17.1	17.1	1.1	251	22.8	21.5	7.6	260	11.7	11.5	2.1			
28	51	2.1	-1.6	-1.3	36	1.9	-1.1	-1.5	22	1.8	-0.7	-1.7	291	6.4	6.0	-2.3	264	18.6	18.5	1.9	251	23.2	22.0	7.5	255	8.0	7.7	2.0			
29	31	2.1	-1.1	-1.8	32	2.5	-1.3	-2.1	10	1.7	-0.3	-1.7	290	5.8	5.4	-2.0	266	15.5	15.5	1.0	253	20.6	19.7	6.1	245	8.9	8.1	3.7			
30	37	2.1	-1.3	-1.7	31	2.3	-1.2	-2.0	14	2.1	-0.5	-2.0	286	5.0	4.8	-1.4	262	16.8	16.6	2.4	250	23.9	22.4	8.2	244	11.5	10.3	5.1			
31	44	2.9	-2.0	-2.1	49	2.8	-2.1	-1.8	33	2.4	-1.3	-2.0	295	5.9	5.3	-2.5	274	16.3	16.3	-1.0	250	21.3	20.0	7.2	248	13.9	12.9	5.2			

Daily Normals of Upper Air Winds (1971-2000)

AHMEDABAD

NOVEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	33	3.5	-1.9	-2.9	48	3.1	-2.3	-2.1	27	1.3	-0.6	-1.2	301	6.2	5.3	-3.2	272	15.0	15.0	-0.4	257	18.7	18.2	4.2	251	7.6	7.2	2.5			
2	29	2.6	-1.3	-2.3	58	1.5	-1.3	-0.8	21	0.9	-0.3	-0.8	294	6.8	6.2	-2.7	278	16.2	16.0	-2.3	263	20.3	20.1	2.6	259	9.0	8.8	1.7			
3	39	2.1	-1.3	-1.6	55	2.8	-2.3	-1.6	31	1.7	-0.9	-1.5	293	5.8	5.3	-2.3	273	16.6	16.6	-0.9	259	21.6	21.2	4.2	235	7.7	6.3	4.4			
4	47	2.5	-1.8	-1.7	45	2.5	-1.8	-1.8	36	2.2	-1.3	-1.8	298	7.3	6.5	-3.4	284	17.1	16.6	-4.1	256	21.6	21.0	5.1	241	9.6	8.4	4.7			
5	30	2.4	-1.2	-2.1	28	2.1	-1.0	-1.9	355	2.2	0.2	-2.2	300	6.1	5.3	-3.0	280	14.2	14.0	-2.4	266	20.5	20.5	1.3	269	12.9	12.9	0.3			
6	24	2.4	-1.0	-2.2	39	2.8	-1.8	-2.2	340	2.0	0.7	-1.9	295	6.6	6.0	-2.8	275	16.6	16.5	-1.4	256	24.1	23.4	5.9	268	12.1	12.1	0.5			
7	45	2.8	-2.0	-2.0	55	3.3	-2.7	-1.9	300	0.8	0.7	-0.4	286	7.8	7.5	-2.2	265	20.8	20.7	1.9	257	22.8	22.2	5.1	235	12.7	10.4	7.3			
8	27	3.0	-1.4	-2.7	42	1.2	-0.8	-0.9	295	1.4	1.3	-0.6	288	7.4	7.0	-2.3	268	17.9	17.9	0.6	261	24.1	23.8	3.8	268	12.4	12.4	0.4			
9	33	3.0	-1.6	-2.5	27	2.2	-1.0	-2.0	355	2.1	0.2	-2.1	293	6.9	6.4	-2.7	273	18.3	18.3	-0.8	266	23.1	23.0	1.7	261	13.4	13.3	2.0			
10	31	2.1	-1.1	-1.8	32	2.2	-1.2	-1.9	6	0.9	-0.1	-0.9	292	6.9	6.4	-2.6	276	18.9	18.8	-2.1	262	25.4	25.1	3.7	254	14.0	13.5	3.8			
11	24	1.7	-0.7	-1.6	45	1.8	-1.3	-1.3	337	1.5	0.6	-1.4	308	6.3	5.0	-3.9	284	18.1	17.5	-4.5	269	24.1	24.1	0.4	259	15.3	15.0	2.8			
12	5	2.1	-0.2	-2.1	30	2.0	-1.0	-1.7	360	1.4	0.0	-1.4	303	7.2	6.1	-3.9	282	16.2	15.9	-3.3	263	20.3	20.2	2.4	253	12.3	11.8	3.5			
13	31	3.3	-1.7	-2.8	45	2.0	-1.4	-1.4	7	1.7	-0.2	-1.7	292	6.2	5.8	-2.3	275	16.6	16.5	-1.3	257	21.6	21.1	4.7	251	9.0	8.5	2.9			
14	48	2.5	-1.9	-1.7	49	2.1	-1.6	-1.4	3	1.7	-0.1	-1.7	284	6.8	6.6	-1.7	267	18.6	18.6	1.0	258	27.0	26.4	5.5	261	13.4	13.2	2.1			
15	60	3.9	-3.4	-2.0	55	2.4	-2.0	-1.4	307	1.0	0.8	-0.6	276	7.2	7.2	-0.8	267	21.4	21.4	1.3	258	22.5	22.0	4.5	260	10.7	10.5	1.9			
16	64	2.8	-2.5	-1.2	74	1.8	-1.7	-0.5	300	2.4	2.1	-1.2	271	7.5	7.5	-0.1	261	19.7	19.4	3.2	262	28.6	28.3	4.0	262	10.3	10.2	1.4			
17	40	2.3	-1.5	-1.8	51	2.1	-1.6	-1.3	277	2.3	2.3	-0.3	274	8.3	8.3	-0.6	266	21.9	21.8	1.5	263	26.2	26.0	3.4	265	14.2	14.1	1.3			
18	35	1.9	-1.1	-1.6	50	1.6	-1.2	-1.0	268	3.2	3.2	0.1	274	10.8	10.8	-0.8	265	24.2	24.1	1.9	252	28.6	27.2	8.8	260	17.2	16.9	3.0			
19	50	2.6	-2.0	-1.7	38	2.3	-1.4	-1.8	287	3.0	2.9	-0.9	271	10.4	10.4	-0.1	260	23.5	23.1	4.1	253	28.8	27.6	8.2	250	13.5	12.7	4.6			
20	27	3.1	-1.4	-2.8	20	1.5	-0.5	-1.4	293	2.5	2.3	-1.0	277	10.0	9.9	-1.3	261	25.8	25.5	4.1	247	35.2	32.3	13.9	260	15.7	15.5	2.6			
21	35	1.9	-1.1	-1.6	28	1.9	-0.9	-1.7	277	2.3	2.3	-0.3	282	9.2	9.0	-1.9	260	21.4	21.1	3.6	253	27.4	26.2	8.1	267	12.7	12.7	0.7			
22	24	2.0	-0.8	-1.8	23	1.5	-0.6	-1.4	270	2.5	2.5	0.0	290	9.9	9.3	-3.4	266	22.4	22.3	1.5	259	25.6	25.2	4.7	253	17.1	16.4	4.9			
23	53	4.3	-3.4	-2.6	16	1.5	-0.4	-1.4	281	3.3	3.2	-0.6	278	10.6	10.5	-1.5	273	21.3	21.3	-1.1	261	29.2	28.9	4.5	264	17.4	17.3	1.7			
24	51	3.3	-2.6	-2.1	21	0.9	-0.3	-0.8	280	3.4	3.3	-0.6	279	11.4	11.3	-1.8	268	24.4	24.4	0.7	261	32.2	31.8	5.0	269	16.8	16.8	0.4			
25	43	2.6	-1.8	-1.9	18	1.6	-0.5	-1.5	276	5.1	5.1	-0.5	277	12.3	12.2	-1.4	267	22.7	22.7	1.3	259	27.5	27.0	5.2	272	16.3	16.3	-0.5			
26	34	2.2	-1.2	-1.8	357	1.7	0.1	-1.7	277	4.0	4.0	-0.5	267	12.8	12.8	0.6	266	25.8	25.8	1.6	262	31.5	31.2	4.3	272	17.4	17.4	-0.6			
27	5	2.3	-0.2	-2.3	344	1.8	0.5	-1.7	273	5.4	5.4	-0.3	277	13.2	13.1	-1.5	263	25.1	24.9	3.1	260	30.7	30.2	5.3	279	14.2	14.0	-2.1			
28	34	3.4	-1.9	-2.8	31	2.1	-1.1	-1.8	304	4.0	3.3	-2.2	279	11.3	11.2	-1.7	268	27.6	27.6	1.0	259	34.1	33.5	6.5	269	15.2	15.2	0.3			
29	34	2.5	-1.4	-2.1	28	2.1	-1.0	-1.9	281	3.2	3.1	-0.6	273	11.5	11.5	-0.6	270	23.4	23.4	0.0	263	32.0	31.7	4.1	266	11.9	11.9	0.8			
30	20	2.9	-1.0	-2.7	28	1.7	-0.8	-1.5	298	3.2	2.8	-1.5	276	13.1	13.0	-1.3	267	26.3	26.3	1.4	266	31.1	31.0	1.9	250	15.5	14.6	5.2			

Daily Normals of Upper Air Winds (1971-2000)

AHMEDABAD

DECEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	43	3.7	-2.5	-2.7	52	1.8	-1.4	-1.1	288	3.6	3.4	-1.1	270	12.5	12.5	0.0	268	28.6	28.6	0.8	258	35.4	34.6	7.5	264	21.6	21.5	2.2			
2	48	2.8	-2.1	-1.9	34	0.7	-0.4	-0.6	269	4.4	4.4	0.1	268	14.9	14.9	0.4	265	31.3	31.2	2.6	263	35.9	35.6	4.6	265	21.3	21.2	1.9			
3	45	2.3	-1.6	-1.6	42	1.3	-0.9	-1.0	251	6.0	5.7	2.0	270	13.3	13.3	0.0	264	25.8	25.6	2.9	262	33.9	33.5	4.9	256	21.5	20.9	5.1			
4	44	3.9	-2.7	-2.8	77	1.3	-1.3	-0.3	271	5.4	5.4	-0.1	269	14.4	14.4	0.3	263	27.0	26.8	3.4	257	30.4	29.6	7.1	254	20.7	19.9	5.6			
5	49	3.0	-2.3	-2.0	37	0.5	-0.3	-0.4	280	5.3	5.2	-0.9	272	14.0	14.0	-0.5	259	25.9	25.4	5.0	253	29.8	28.5	8.8	254	20.1	19.3	5.7			
6	57	1.7	-1.4	-0.9	21	1.9	-0.7	-1.8	295	4.3	3.9	-1.8	275	15.3	15.2	-1.4	266	27.9	27.8	2.1	244	35.9	32.3	15.6	255	23.1	22.3	5.9			
7	62	2.4	-2.1	-1.1	34	1.4	-0.8	-1.2	294	3.4	3.1	-1.4	276	11.8	11.7	-1.3	260	24.0	23.7	4.0	255	30.1	29.1	7.6	273	23.2	23.2	-1.4			
8	42	2.7	-1.8	-2.0	43	1.9	-1.3	-1.4	266	4.1	4.1	0.3	276	13.5	13.4	-1.3	259	27.9	27.4	5.2	255	33.2	32.0	8.8	260	25.1	24.7	4.4			
9	18	2.9	-0.9	-2.8	7	1.7	-0.2	-1.7	276	4.7	4.7	-0.5	280	12.3	12.1	-2.2	268	28.5	28.5	1.1	259	32.7	32.1	6.0	264	22.0	21.9	2.2			
10	31	2.9	-1.5	-2.5	40	1.7	-1.1	-1.3	293	3.9	3.6	-1.5	263	13.8	13.7	1.7	261	26.5	26.2	4.1	245	31.2	28.2	13.4	260	18.6	18.3	3.2			
11	41	2.9	-1.9	-2.2	49	0.9	-0.7	-0.6	270	4.0	4.0	0.0	276	14.2	14.1	-1.4	265	27.2	27.1	2.2	262	32.7	32.4	4.5	267	20.8	20.8	1.1			
12	44	3.2	-2.2	-2.3	60	2.2	-1.9	-1.1	292	3.5	3.2	-1.3	276	12.8	12.7	-1.4	265	26.5	26.4	2.5	264	27.6	27.5	2.7	263	20.6	20.4	2.5			
13	55	3.9	-3.2	-2.2	50	1.7	-1.3	-1.1	275	3.2	3.2	-0.3	273	11.8	11.8	-0.6	266	26.5	26.4	2.0	259	33.8	33.1	6.6	263	16.6	16.5	2.1			
14	60	3.0	-2.6	-1.5	117	0.7	-0.6	0.3	273	4.1	4.1	-0.2	276	13.4	13.3	-1.4	269	27.4	27.4	0.3	265	33.8	33.7	3.0	275	23.4	23.3	-1.9			
15	67	3.4	-3.1	-1.3	207	0.4	0.2	0.4	279	3.8	3.8	-0.6	272	12.6	12.6	-0.4	269	24.8	24.8	0.5	273	35.1	35.1	-1.8	263	20.4	20.2	2.5			
16	35	1.9	-1.1	-1.6	293	0.8	0.7	-0.3	267	4.3	4.3	0.2	264	14.5	14.4	1.5	265	25.1	25.0	2.0	261	35.6	35.1	5.8	262	25.9	25.7	3.5			
17	41	3.5	-2.3	-2.6	45	1.0	-0.7	-0.7	262	3.7	3.7	0.5	276	13.0	12.9	-1.4	270	25.4	25.4	0.2	264	32.9	32.7	3.4	261	20.8	20.5	3.4			
18	21	3.1	-1.1	-2.9	76	0.4	-0.4	-0.1	270	4.1	4.1	0.0	276	12.0	11.9	-1.2	273	28.4	28.3	-1.7	270	36.6	36.6	0.3	271	22.3	22.3	-0.5			
19	42	2.8	-1.9	-2.1	339	1.4	0.5	-1.3	266	4.4	4.4	0.3	267	13.8	13.8	0.7	263	27.0	26.8	3.1	259	33.7	33.1	6.5	271	21.6	21.6	-0.3			
20	19	2.1	-0.7	-2.0	34	1.1	-0.6	-0.9	288	4.6	4.4	-1.4	271	12.6	12.6	-0.3	261	30.7	30.3	4.7	253	39.4	37.7	11.4	257	27.2	26.5	6.0			
21	63	1.8	-1.6	-0.8	135	0.3	-0.2	0.2	262	5.8	5.7	0.8	267	15.0	15.0	0.9	261	29.1	28.7	4.6	250	44.1	41.4	15.3	256	29.4	28.5	7.3			
22	16	2.2	-0.6	-2.1	306	1.4	1.1	-0.8	267	6.4	6.4	0.3	274	18.6	18.6	-1.2	263	30.8	30.6	3.7	258	36.8	36.0	7.7	256	26.7	25.9	6.4			
23	21	1.9	-0.7	-1.8	345	1.1	0.3	-1.1	281	5.9	5.8	-1.1	268	16.3	16.3	0.5	269	28.3	28.3	0.3	261	36.8	36.3	6.0	269	25.9	25.9	0.6			
24	21	3.0	-1.1	-2.8	347	1.3	0.3	-1.3	287	5.1	4.9	-1.5	278	16.2	16.1	-2.2	270	29.7	29.7	-0.2	264	35.1	34.9	3.4	266	22.5	22.4	1.5			
25	39	3.2	-2.0	-2.5	339	0.9	0.3	-0.8	277	5.2	5.2	-0.6	267	15.4	15.4	0.9	267	28.5	28.5	1.4	267	37.1	37.0	2.0	259	21.8	21.4	4.2			
26	47	3.5	-2.6	-2.4	360	0.5	0.0	-0.5	265	6.4	6.4	0.6	263	15.6	15.5	1.8	267	31.1	31.1	1.6	264	38.8	38.6	4.3	259	18.6	18.3	3.4			
27	43	1.9	-1.3	-1.4	236	0.4	0.3	0.2	265	6.3	6.3	0.5	269	17.6	17.6	0.2	262	31.3	31.0	4.4	261	37.6	37.1	6.0	270	24.3	24.3	0.0			
28	41	2.1	-1.4	-1.6	265	1.1	1.1	0.1	273	8.1	8.1	-0.4	275	17.3	17.2	-1.5	275	28.4	28.3	-2.5	263	38.1	37.8	4.7	265	27.6	27.5	2.3			
29	360	1.9	0.0	-1.9	287	1.7	1.6	-0.5	278	6.7	6.6	-0.9	269	16.2	16.2	0.4	269	31.8	31.8	0.7	262	34.1	33.8	4.6	263	23.9	23.7	2.8			
30	45	2.8	-2.0	-2.0	297	1.1	1.0	-0.5	269	6.5	6.5	0.1	269	16.4	16.4	0.4	268	32.6	32.6	1.1	264	40.2	40.0	4.1	259	34.9	34.2	6.8			
31	50	2.3	-1.8	-1.5	273	1.7	1.7	-0.1	259	7.2	7.1	1.4	272	17.5	17.5	-0.7	265	32.4	32.3	2.7	264	35.8	35.6	3.5	261	25.9	25.6	4.0			

Daily Normals of Upper Air Winds (1971-2000)

AMINI

JANUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	43	2.3	-1.6	-1.7	72	2.3	-2.2	-0.7	85	3.6	-3.6	-0.3	49	2.9	-2.2	-1.9	243	7.9	7.0	3.6	224	9.0	6.2	6.5	272	10.0	10.0	-0.3
2	45	3.0	-2.1	-2.1	82	2.1	-2.1	-0.3	87	2.2	-2.2	-0.1	23	1.3	-0.5	-1.2	220	8.9	5.8	6.8	217	11.3	6.9	9.0	301	2.9	2.5	-1.5
3	42	2.8	-1.9	-2.1	90	2.1	-2.1	0.0	75	3.4	-3.3	-0.9	47	2.1	-1.5	-1.4	217	7.4	4.5	5.9	226	14.1	10.2	9.8	260	5.8	5.7	1.0
4	63	3.5	-3.1	-1.6	78	2.4	-2.3	-0.5	88	2.8	-2.8	-0.1	86	1.4	-1.4	-0.1	238	5.3	4.5	2.8	204	7.7	3.1	7.1	227	1.6	1.2	1.1
5	37	3.8	-2.3	-3.0	68	2.4	-2.2	-0.9	90	0.6	-0.6	0.0	39	1.4	-0.9	-1.1	264	2.8	2.8	0.3	230	11.7	9.0	7.5	148	7.0	-3.7	5.9
6	36	1.7	-1.0	-1.4	48	2.5	-1.9	-1.7	235	1.9	1.6	1.1	282	1.4	1.4	-0.3	273	5.2	5.2	-0.3	244	9.0	8.1	4.0	—	—	—	—
7	3	1.9	-0.1	-1.9	60	1.6	-1.4	-0.8	83	2.4	-2.4	-0.3	156	1.2	-0.5	1.1	258	6.1	6.0	1.3	241	9.8	8.6	4.7	256	6.7	6.5	1.6
8	54	3.2	-2.6	-1.9	74	2.6	-2.5	-0.7	85	2.2	-2.2	-0.2	82	1.4	-1.4	-0.2	272	3.2	3.2	-0.1	214	6.5	3.7	5.4	41	6.0	-3.9	-4.5
9	45	2.5	-1.8	-1.8	86	2.9	-2.9	-0.2	96	3.1	-3.1	0.3	53	2.1	-1.7	-1.3	256	6.4	6.2	1.6	242	8.9	7.9	4.2	273	5.4	5.4	-0.3
10	21	3.1	-1.1	-2.9	63	1.3	-1.2	-0.6	107	3.0	-2.9	0.9	107	2.1	-2.0	0.6	263	3.5	3.5	0.4	114	1.2	-1.1	0.5	90	9.0	-9.0	0.0
11	27	2.8	-1.3	-2.5	34	1.1	-0.6	-0.9	72	1.3	-1.2	-0.4	49	1.8	-1.4	-1.2	257	2.8	2.7	0.6	257	7.3	7.1	1.6	61	9.9	-8.7	-4.8
12	8	1.5	-0.2	-1.5	32	1.5	-0.8	-1.3	326	0.7	0.4	-0.6	29	4.3	-2.1	-3.8	266	1.5	1.5	0.1	182	10.5	0.3	10.5	88	6.3	-6.3	-0.2
13	11	2.6	-0.5	-2.6	92	2.4	-2.4	0.1	93	1.9	-1.9	0.1	55	5.8	-4.8	-3.3	241	5.1	4.5	2.5	224	5.6	3.9	4.0	135	6.9	-4.9	4.9
14	40	2.6	-1.7	-2.0	93	2.2	-2.2	0.1	106	1.5	-1.4	0.4	84	3.8	-3.8	-0.4	264	6.2	6.2	0.7	199	4.6	1.5	4.4	98	5.0	-5.0	0.7
15	18	2.3	-0.7	-2.2	94	2.6	-2.6	0.2	104	1.6	-1.6	0.4	73	1.0	-1.0	-0.3	292	1.6	1.5	-0.6	189	8.3	1.3	8.2	117	5.1	-4.5	2.3
16	36	2.7	-1.6	-2.2	69	3.3	-3.1	-1.2	81	2.5	-2.5	-0.4	114	2.7	-2.5	1.1	247	3.4	3.1	1.3	223	3.4	2.3	2.5	81	2.6	-2.6	-0.4
17	32	3.6	-1.9	-3.1	98	3.0	-3.0	0.4	106	3.2	-3.1	0.9	70	3.2	-3.0	-1.1	231	3.6	2.8	2.3	197	7.0	2.1	6.7	90	1.8	-1.8	0.0
18	51	3.2	-2.5	-2.0	57	3.3	-2.8	-1.8	87	1.9	-1.9	-0.1	74	2.6	-2.5	-0.7	213	4.5	2.5	3.8	175	8.7	-0.8	8.7	148	5.1	-2.7	4.3
19	41	4.4	-2.9	-3.3	75	3.1	-3.0	-0.8	90	2.5	-2.5	0.0	77	4.3	-4.2	-1.0	187	1.6	0.2	1.6	175	10.0	-0.9	10.0	99	9.0	-8.9	1.4
20	9	3.7	-0.6	-3.7	58	1.9	-1.6	-1.0	15	2.0	-0.5	-1.9	107	3.0	-2.9	0.9	208	2.4	1.1	2.1	183	10.8	0.5	10.8	128	9.0	-7.1	5.5
21	19	5.0	-1.6	-4.7	61	4.1	-3.6	-2.0	66	3.7	-3.4	-1.5	79	3.2	-3.1	-0.6	212	2.6	1.4	2.2	200	8.0	2.8	7.5	236	8.4	7.0	4.7
22	37	3.1	-1.9	-2.5	57	3.0	-2.5	-1.6	63	3.3	-2.9	-1.5	48	1.2	-0.9	-0.8	214	2.3	1.3	1.9	172	8.8	-1.3	8.7	257	3.1	3.0	0.7
23	14	4.2	-1.0	-4.1	70	3.3	-3.1	-1.1	87	4.3	-4.3	-0.2	63	1.6	-1.4	-0.7	252	4.7	4.5	1.5	216	9.0	5.3	7.3	280	6.6	6.5	-1.1
24	32	3.4	-1.8	-2.9	56	3.7	-3.1	-2.1	71	6.4	-6.0	-2.1	98	3.6	-3.6	0.5	8	1.4	-0.2	-1.4	181	6.6	0.1	6.6	305	4.4	3.6	-2.5
25	54	3.9	-3.2	-2.3	53	3.9	-3.1	-2.3	81	4.7	-4.6	-0.7	80	4.5	-4.4	-0.8	259	1.5	1.5	0.3	197	4.8	1.4	4.6	184	1.3	0.1	1.3
26	36	3.4	-2.0	-2.8	55	3.3	-2.7	-1.9	64	3.7	-3.3	-1.6	87	3.7	-3.7	-0.2	328	2.5	1.3	-2.1	221	4.8	3.1	3.6	26	5.7	-2.5	-5.1
27	61	3.1	-2.7	-1.5	72	3.2	-3.0	-1.0	52	2.8	-2.2	-1.7	67	4.4	-4.1	-1.7	292	2.4	2.2	-0.9	156	6.8	-2.8	6.2	—	—	—	—
28	347	2.6	0.6	-2.5	67	3.3	-3.0	-1.3	65	3.5	-3.2	-1.5	90	4.0	-4.0	0.0	300	2.4	2.1	-1.2	185	9.5	0.8	9.5	136	3.6	-2.5	2.6
29	20	3.0	-1.0	-2.8	42	3.0	-2.0	-2.2	79	3.6	-3.5	-0.7	64	2.5	-2.3	-1.1	265	3.2	3.2	0.3	238	12.3	10.4	6.6	—	—	—	—
30	355	2.3	0.2	-2.3	88	2.7	-2.7	-0.1	81	3.8	-3.8	-0.6	115	1.7	-1.5	0.7	252	6.5	6.2	2.0	236	4.8	4.0	2.7	252	7.9	7.5	2.5
31	12	1.9	-0.4	-1.9	96	3.0	-3.0	0.3	79	3.2	-3.1	-0.6	29	4.3	-2.1	-3.8	308	5.4	4.3	-3.3	285	6.1	5.9	-1.6	327	12.0	6.5	-10.1

Daily Normals of Upper Air Winds (1971-2000)

AMINI

MARCH

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	20	1.5	-0.5	-1.4	58	2.8	-2.4	-1.5	84	4.0	-4.0	-0.4	56	2.2	-1.8	-1.2	268	6.4	6.4	0.2	265	4.8	4.8	0.4	222	6.4	4.3	4.8			
2	355	2.3	0.2	-2.3	74	2.6	-2.5	-0.7	76	4.1	-4.0	-1.0	14	1.2	-0.3	-1.2	246	7.2	6.6	3.0	232	5.4	4.3	3.3	40	12.0	-7.7	-9.2			
3	32	1.5	-0.8	-1.3	96	2.7	-2.7	0.3	88	2.8	-2.8	-0.1	43	3.8	-2.6	-2.8	338	1.1	0.4	-1.0	282	8.8	8.6	-1.8	233	3.1	2.5	1.9			
4	360	3.1	0.0	-3.1	55	3.3	-2.7	-1.9	79	4.2	-4.1	-0.8	57	1.7	-1.4	-0.9	262	1.4	1.4	0.2	249	9.0	8.4	3.3	111	1.7	-1.6	0.6			
5	344	2.5	0.7	-2.4	64	2.8	-2.5	-1.2	90	3.7	-3.7	0.0	83	2.4	-2.4	-0.3	229	3.2	2.4	2.1	219	4.3	2.7	3.3	152	2.1	-1.0	1.9			
6	9	2.6	-0.4	-2.6	57	2.0	-1.7	-1.1	107	3.8	-3.6	1.1	88	3.2	-3.2	-0.1	222	2.7	1.8	2.0	286	13.7	13.2	-3.7	236	6.5	5.4	3.7			
7	17	3.7	-1.1	-3.5	68	1.8	-1.7	-0.7	96	3.0	-3.0	0.3	61	1.3	-1.1	-0.6	273	6.3	6.3	-0.3	279	9.8	9.7	-1.6	69	3.4	-3.2	-1.2			
8	23	1.3	-0.5	-1.2	79	2.0	-2.0	-0.4	71	3.4	-3.2	-1.1	23	1.5	-0.6	-1.4	283	7.0	6.8	-1.6	257	5.8	5.7	1.3	343	6.4	1.9	-6.1			
9	341	1.8	0.6	-1.7	65	1.7	-1.5	-0.7	90	2.8	-2.8	0.0	358	2.6	0.1	-2.6	300	7.6	6.6	-3.8	278	4.9	4.8	-0.7	117	2.9	-2.6	1.3			
10	10	2.3	-0.4	-2.3	46	3.0	-2.2	-2.1	92	3.4	-3.4	0.1	360	1.8	0.0	-1.8	320	4.5	2.9	-3.4	234	5.3	4.3	3.1	78	6.0	-5.9	-1.3			
11	20	2.3	-0.8	-2.2	74	1.8	-1.7	-0.5	97	1.6	-1.6	0.2	360	1.9	0.0	-1.9	242	5.0	4.4	2.3	259	7.9	7.8	1.5	131	2.0	-1.5	1.3			
12	351	3.2	0.5	-3.2	61	3.8	-3.3	-1.8	126	2.6	-2.1	1.5	2	2.6	-0.1	-2.6	288	4.5	4.3	-1.4	290	6.6	6.2	-2.2	275	7.6	7.6	-0.6			
13	316	3.5	2.4	-2.5	28	1.7	-0.8	-1.5	82	4.5	-4.5	-0.6	34	3.2	-1.8	-2.7	311	5.7	4.3	-3.8	262	5.0	5.0	0.7	8	1.4	-0.2	-1.4			
14	350	4.0	0.7	-3.9	53	3.0	-2.4	-1.8	94	6.5	-6.5	0.4	32	3.6	-1.9	-3.1	298	2.1	1.9	-1.0	280	7.7	7.6	-1.3	54	8.4	-6.8	-5.0			
15	348	2.5	0.5	-2.4	68	2.9	-2.7	-1.1	86	5.9	-5.9	-0.4	63	5.8	-5.2	-2.6	21	2.6	-0.9	-2.4	245	4.5	4.1	1.9	311	0.9	0.7	-0.6			
16	345	3.9	1.0	-3.8	33	3.1	-1.7	-2.6	83	5.2	-5.2	-0.6	77	4.6	-4.5	-1.0	241	1.8	1.6	0.9	231	1.4	1.1	0.9	327	2.7	1.5	-2.3			
17	328	2.5	1.3	-2.1	62	3.2	-2.8	-1.5	92	6.1	-6.1	0.2	46	2.9	-2.1	-2.0	300	1.4	1.2	-0.7	229	2.3	1.7	1.5	88	3.0	-3.0	-0.1			
18	348	3.3	0.7	-3.2	34	3.0	-1.7	-2.5	86	5.6	-5.6	-0.4	68	4.1	-3.8	-1.5	265	2.2	2.2	0.2	214	5.0	2.8	4.1	265	4.8	4.8	0.4			
19	333	2.0	0.9	-1.8	76	3.0	-2.9	-0.7	89	5.9	-5.9	-0.1	73	2.7	-2.6	-0.8	237	3.1	2.6	1.7	258	7.3	7.1	1.5	180	1.2	0.0	1.2			
20	325	1.9	1.1	-1.6	23	2.3	-0.9	-2.1	85	6.5	-6.5	-0.6	65	3.3	-3.0	-1.4	280	2.2	2.2	-0.4	248	3.5	3.3	1.3	348	4.2	0.9	-4.1			
21	328	2.8	1.5	-2.4	32	2.5	-1.3	-2.1	81	6.9	-6.8	-1.1	86	4.1	-4.1	-0.3	250	2.3	2.2	0.8	214	2.5	1.4	2.1	249	5.3	4.9	1.9			
22	358	3.7	0.1	-3.7	28	4.7	-2.2	-4.1	83	6.7	-6.7	-0.8	74	3.3	-3.2	-0.9	239	3.7	3.2	1.9	246	7.0	6.4	2.9	145	3.2	-1.8	2.6			
23	313	1.6	1.2	-1.1	31	3.3	-1.7	-2.8	88	6.1	-6.1	-0.2	70	2.7	-2.5	-0.9	255	2.8	2.7	0.7	249	9.0	8.4	3.3	317	25.0	17.0	-18.3			
24	289	1.8	1.7	-0.6	29	2.9	-1.4	-2.5	82	5.2	-5.2	-0.7	119	1.0	-0.9	0.5	243	5.4	4.8	2.4	208	5.9	2.8	5.2	324	6.0	3.5	-4.9			
25	315	2.8	2.0	-2.0	29	3.5	-1.7	-3.1	85	5.5	-5.5	-0.5	27	1.1	-0.5	-1.0	246	6.0	5.5	2.5	275	12.4	12.4	-1.1	180	6.3	0.0	6.3			
26	286	1.8	1.7	-0.5	24	2.2	-0.9	-2.0	96	3.7	-3.7	0.4	67	1.3	-1.2	-0.5	226	7.6	5.4	5.3	273	5.5	5.5	-0.3	288	7.6	7.2	-2.4			
27	305	1.9	1.6	-1.1	39	1.3	-0.8	-1.0	75	4.3	-4.2	-1.1	45	4.0	-2.8	-2.8	325	5.2	3.0	-4.3	284	7.2	7.0	-1.8	86	2.8	-2.8	-0.2			
28	311	2.3	1.7	-1.5	19	1.8	-0.6	-1.7	89	5.3	-5.3	-0.1	54	3.1	-2.5	-1.8	266	4.7	4.7	0.3	240	5.6	4.8	2.8	286	9.9	9.5	-2.7			
29	299	1.8	1.6	-0.9	65	1.7	-1.5	-0.7	95	6.1	-6.1	0.5	76	4.9	-4.7	-1.2	279	3.0	3.0	-0.5	287	3.7	3.5	-1.1	185	3.3	0.3	3.3			
30	309	1.9	1.5	-1.2	50	2.3	-1.8	-1.5	79	6.2	-6.1	-1.2	84	4.8	-4.8	-0.5	239	4.4	3.8	2.3	252	8.3	7.9	2.6	—	—	—	—			
31	315	2.5	1.8	-1.8	20	3.2	-1.1	-3.0	80	7.3	-7.2	-1.3	69	3.6	-3.4	-1.3	270	0.8	0.8	0.0	251	3.7	3.5	1.2	—	—	—	—			

Daily Normals of Upper Air Winds (1971-2000)

AMINI

APRIL

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	323	5.3	3.2	-4.2	14	4.5	-1.1	-4.4	77	7.4	-7.2	-1.6	89	5.0	-5.0	-0.1	228	4.8	3.6	3.2	188	6.4	0.9	6.3	185	2.5	0.2	2.5			
2	335	3.1	1.3	-2.8	27	3.4	-1.5	-3.0	92	6.3	-6.3	0.2	87	3.9	-3.9	-0.2	197	2.7	0.8	2.6	182	6.5	0.2	6.5	173	7.9	-0.9	7.8			
3	336	1.0	0.4	-0.9	28	2.1	-1.0	-1.9	82	6.9	-6.8	-1.0	117	2.7	-2.4	1.2	255	5.2	5.0	1.3	263	11.6	11.5	1.4	—	—	—	—			
4	225	0.1	0.1	0.1	3	2.1	-0.1	-2.1	82	7.3	-7.2	-1.0	90	1.5	-1.5	0.0	247	5.1	4.7	2.0	215	7.7	4.4	6.3	—	—	—	—			
5	328	2.2	1.2	-1.9	16	3.2	-0.9	-3.1	86	4.9	-4.9	-0.3	45	1.7	-1.2	-1.2	262	6.0	5.9	0.8	238	7.0	5.9	3.7	97	15.0	-14.9	1.8			
6	315	4.5	3.2	-3.2	75	2.3	-2.2	-0.6	84	7.4	-7.4	-0.8	69	2.6	-2.4	-0.9	290	3.5	3.3	-1.2	231	8.1	6.3	5.1	98	3.0	-3.0	0.4			
7	316	5.9	4.1	-4.3	17	3.8	-1.1	-3.6	79	8.7	-8.5	-1.7	82	3.4	-3.4	-0.5	90	1.2	-1.2	0.0	218	6.1	3.7	4.8	274	1.3	1.3	-0.1			
8	315	6.9	4.9	-4.9	17	2.1	-0.6	-2.0	71	7.1	-6.7	-2.3	61	4.7	-4.1	-2.3	228	4.0	3.0	2.7	267	9.1	9.1	0.5	240	11.0	9.5	5.5			
9	308	6.0	4.7	-3.7	23	2.6	-1.0	-2.4	67	6.0	-5.5	-2.3	73	3.4	-3.2	-1.0	308	1.8	1.4	-1.1	240	9.1	7.9	4.5	153	6.6	-3.0	5.9			
10	331	5.0	2.4	-4.4	12	1.9	-0.4	-1.9	62	4.4	-3.9	-2.1	77	8.0	-7.8	-1.8	101	0.5	-0.5	0.1	206	4.3	1.9	3.9	104	5.4	-5.2	1.3			
11	326	5.0	2.8	-4.2	5	3.2	-0.3	-3.2	81	4.9	-4.8	-0.8	74	4.3	-4.1	-1.2	111	3.4	-3.2	1.2	168	2.5	-0.5	2.4	113	6.3	-5.8	2.5			
12	323	3.0	1.8	-2.4	31	3.5	-1.8	-3.0	76	5.5	-5.3	-1.3	68	3.2	-3.0	-1.2	99	2.5	-2.5	0.4	40	2.6	-1.7	-2.0	242	8.9	7.9	4.2			
13	307	2.0	1.6	-1.2	6	1.0	-0.1	-1.0	83	7.4	-7.3	-0.9	81	2.0	-2.0	-0.3	281	4.4	4.3	-0.8	214	7.9	4.4	6.6	267	5.0	5.0	0.3			
14	319	3.5	2.3	-2.6	28	1.5	-0.7	-1.3	78	6.9	-6.8	-1.4	104	4.0	-3.9	1.0	176	1.6	-0.1	1.6	183	5.7	0.3	5.7	—	—	—	—			
15	308	3.3	2.6	-2.0	16	1.9	-0.5	-1.8	89	4.7	-4.7	-0.1	104	3.7	-3.6	0.9	279	3.7	3.7	-0.6	253	4.7	4.5	1.4	337	4.0	1.6	-3.7			
16	285	2.4	2.3	-0.6	360	2.4	0.0	-2.4	83	5.6	-5.6	-0.7	66	1.0	-0.9	-0.4	270	3.1	3.1	0.0	258	4.0	3.9	0.8	335	5.0	2.1	-4.5			
17	302	0.9	0.8	-0.5	11	3.2	-0.6	-3.1	86	5.8	-5.8	-0.4	70	2.0	-1.9	-0.7	254	3.2	3.1	0.9	250	6.4	6.0	2.2	90	0.7	-0.7	0.0			
18	319	5.2	3.4	-3.9	29	3.3	-1.6	-2.9	89	6.8	-6.8	-0.1	77	3.2	-3.1	-0.7	245	4.4	4.0	1.9	257	5.9	5.8	1.3	—	—	—	—			
19	341	5.9	1.9	-5.6	27	3.0	-1.4	-2.7	83	6.4	-6.4	-0.8	95	2.5	-2.5	0.2	253	6.8	6.5	2.0	170	9.7	-1.7	9.5	—	—	—	—			
20	332	6.0	2.8	-5.3	30	2.0	-1.0	-1.7	85	6.0	-6.0	-0.5	108	2.3	-2.2	0.7	321	2.2	1.4	-1.7	254	4.6	4.4	1.3	120	9.0	-7.8	4.5			
21	333	4.6	2.1	-4.1	25	1.4	-0.6	-1.3	80	5.2	-5.1	-0.9	55	1.9	-1.6	-1.1	269	6.5	6.5	0.1	244	11.7	10.5	5.2	10	5.4	-0.9	-5.3			
22	334	5.0	2.2	-4.5	5	3.5	-0.3	-3.5	67	6.5	-6.0	-2.5	111	1.4	-1.3	0.5	281	1.6	1.6	-0.3	233	7.6	6.1	4.6	97	9.0	-8.9	1.1			
23	321	5.8	3.6	-4.5	356	2.8	0.2	-2.8	81	5.1	-5.0	-0.8	355	1.2	0.1	-1.2	259	7.0	6.9	1.4	240	12.6	10.9	6.4	178	3.6	-0.1	3.6			
24	331	5.5	2.7	-4.8	341	2.4	0.8	-2.3	91	4.3	-4.3	0.1	13	1.7	-0.4	-1.7	279	0.6	0.6	-0.1	253	6.2	5.9	1.8	—	—	—	—			
25	348	3.3	0.7	-3.2	10	2.3	-0.4	-2.3	87	5.8	-5.8	-0.3	358	2.6	0.1	-2.6	289	3.9	3.7	-1.3	261	5.8	5.7	0.9	98	4.2	-4.2	0.6			
26	328	2.5	1.3	-2.1	8	2.2	-0.3	-2.2	83	6.2	-6.1	-0.8	58	1.9	-1.6	-1.0	304	5.7	4.7	-3.2	253	8.7	8.3	2.5	90	5.7	-5.7	0.0			
27	299	3.5	3.1	-1.7	351	1.2	0.2	-1.2	84	5.6	-5.6	-0.6	34	2.2	-1.2	-1.8	293	3.3	3.0	-1.3	236	5.5	4.6	3.1	55	5.0	-4.1	-2.9			
28	324	4.3	2.5	-3.5	352	2.1	0.3	-2.1	81	5.8	-5.7	-0.9	32	3.2	-1.7	-2.7	296	4.1	3.7	-1.8	220	3.9	2.5	3.0	102	4.3	-4.2	0.9			
29	316	4.2	2.9	-3.0	346	3.2	0.8	-3.1	82	4.5	-4.5	-0.6	32	1.5	-0.8	-1.3	257	1.8	1.8	0.4	236	4.0	3.3	2.2	101	3.7	-3.6	0.7			
30	311	4.5	3.4	-3.0	2	3.8	-0.1	-3.8	70	4.7	-4.4	-1.6	48	3.0	-2.2	-2.0	242	2.1	1.9	1.0	227	5.0	3.6	3.4	86	4.4	-4.4	-0.3			

Daily Normals of Upper Air Winds (1971-2000)

AMINI

MAY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	330	4.0	2.0	-3.5	343	2.8	0.8	-2.7	67	4.7	-4.3	-1.8	57	2.4	-2.0	-1.3	265	2.2	2.2	0.2	221	4.0	2.6	3.0	52	5.3	-4.2	-3.3			
2	324	4.2	2.5	-3.4	328	6.7	3.6	-5.7	55	4.7	-3.8	-2.7	20	6.3	-2.1	-5.9	208	3.0	1.4	2.6	196	6.9	1.9	6.6	73	6.3	-6.0	-1.8			
3	328	4.1	2.2	-3.5	356	2.7	0.2	-2.7	76	4.0	-3.9	-1.0	55	2.8	-2.3	-1.6	228	3.1	2.3	2.1	162	5.2	-1.6	5.0	90	7.4	-7.4	0.0			
4	339	3.1	1.1	-2.9	345	3.1	0.8	-3.0	78	4.0	-3.9	-0.8	46	2.9	-2.1	-2.0	51	1.3	-1.0	-0.8	173	3.5	-0.4	3.5	75	7.2	-6.9	-1.9			
5	294	2.4	2.2	-1.0	340	3.2	1.1	-3.0	58	4.7	-4.0	-2.5	31	2.7	-1.4	-2.3	266	1.3	1.3	0.1	202	2.4	0.9	2.2	107	7.3	-7.0	2.2			
6	324	3.4	2.0	-2.8	347	2.7	0.6	-2.6	82	5.2	-5.2	-0.7	81	3.1	-3.1	-0.5	4	1.5	-0.1	-1.5	117	3.8	-3.4	1.7	92	3.3	-3.3	0.1			
7	317	4.2	2.9	-3.1	348	3.4	0.7	-3.3	74	6.8	-6.5	-1.9	57	2.4	-2.0	-1.3	274	2.9	2.9	-0.2	129	5.7	-4.4	3.6	99	3.0	-3.0	0.5			
8	290	4.0	3.8	-1.4	338	2.7	1.0	-2.5	62	5.1	-4.5	-2.4	57	3.0	-2.5	-1.6	90	0.3	-0.3	0.0	160	1.2	-0.4	1.1	87	10.3	-10.3	-0.6			
9	304	4.7	3.9	-2.6	331	3.5	1.7	-3.1	70	4.8	-4.5	-1.6	57	1.7	-1.4	-0.9	342	0.3	0.1	-0.3	144	6.1	-3.6	4.9	98	11.6	-11.5	1.6			
10	312	6.1	4.5	-4.1	338	4.8	1.8	-4.4	77	4.9	-4.8	-1.1	63	0.9	-0.8	-0.4	211	2.6	1.3	2.2	148	1.3	-0.7	1.1	62	5.5	-4.8	-2.6			
11	301	4.5	3.9	-2.3	333	2.8	1.3	-2.5	61	4.3	-3.8	-2.1	41	2.9	-1.9	-2.2	252	2.3	2.2	0.7	131	4.8	-3.6	3.1	84	12.1	-12.0	-1.3			
12	318	4.7	3.1	-3.5	324	3.9	2.3	-3.2	53	3.9	-3.1	-2.3	233	2.0	1.6	1.2	209	1.3	0.6	1.1	110	3.7	-3.5	1.3	109	7.5	-7.1	2.4			
13	309	5.0	3.9	-3.2	302	2.2	1.9	-1.2	54	1.9	-1.5	-1.1	16	1.5	-0.4	-1.4	284	1.6	1.6	-0.4	115	5.6	-5.1	2.4	82	6.9	-6.8	-1.0			
14	283	5.4	5.3	-1.2	298	2.1	1.9	-1.0	56	2.2	-1.8	-1.2	73	2.1	-2.0	-0.6	299	2.1	1.8	-1.0	148	3.2	-1.7	2.7	93	13.4	-13.4	0.6			
15	285	4.9	4.7	-1.3	308	2.8	2.2	-1.7	64	2.8	-2.5	-1.2	350	1.1	0.2	-1.1	180	1.8	0.0	1.8	137	2.6	-1.8	1.9	87	11.8	-11.8	-0.6			
16	304	2.7	2.2	-1.5	290	1.5	1.4	-0.5	55	4.4	-3.6	-2.5	81	3.0	-3.0	-0.5	162	2.3	-0.7	2.2	175	5.5	-0.5	5.5	99	9.3	-9.2	1.4			
17	313	5.0	3.6	-3.4	316	3.2	2.2	-2.3	73	4.9	-4.7	-1.4	87	2.0	-2.0	-0.1	120	2.4	-2.1	1.2	135	8.6	-6.1	6.1	125	7.2	-5.9	4.2			
18	306	5.6	4.5	-3.3	298	3.8	3.4	-1.8	61	3.9	-3.4	-1.9	41	3.7	-2.4	-2.8	104	1.6	-1.6	0.4	121	8.9	-7.6	4.6	116	12.5	-11.2	5.5			
19	331	3.8	1.8	-3.3	308	3.4	2.7	-2.1	34	2.7	-1.5	-2.2	29	3.1	-1.5	-2.7	72	2.6	-2.5	-0.8	123	4.6	-3.9	2.5	104	8.9	-8.7	2.1			
20	333	5.5	2.5	-4.9	328	4.0	2.1	-3.4	32	2.6	-1.4	-2.2	21	2.5	-0.9	-2.3	360	1.4	0.0	-1.4	137	5.4	-3.7	4.0	88	2.3	-2.3	-0.1			
21	327	5.3	2.9	-4.4	327	4.2	2.3	-3.5	32	3.4	-1.8	-2.9	29	3.3	-1.6	-2.9	135	0.4	-0.3	0.3	132	1.2	-0.9	0.8	118	12.7	-11.2	6.0			
22	317	3.8	2.6	-2.8	315	3.4	2.4	-2.4	43	1.8	-1.2	-1.3	53	2.6	-2.1	-1.6	58	2.2	-1.9	-1.2	158	2.4	-0.9	2.2	50	4.0	-3.1	-2.6			
23	311	4.1	3.1	-2.7	319	2.9	1.9	-2.2	74	2.2	-2.1	-0.6	360	1.2	0.0	-1.2	192	2.4	0.5	2.3	165	1.6	-0.4	1.5	137	7.1	-4.9	5.2			
24	304	6.0	5.0	-3.4	289	3.1	2.9	-1.0	81	3.2	-3.2	-0.5	77	2.6	-2.5	-0.6	96	0.9	-0.9	0.1	176	4.1	-0.3	4.1	82	5.2	-5.2	-0.7			
25	306	5.6	4.5	-3.3	306	2.9	2.3	-1.7	92	2.9	-2.9	0.1	60	3.8	-3.3	-1.9	50	1.6	-1.2	-1.0	128	6.6	-5.2	4.1	82	13.1	-13.0	-1.9			
26	297	4.4	3.9	-2.0	287	2.8	2.7	-0.8	81	3.2	-3.2	-0.5	50	5.2	-4.0	-3.3	90	2.4	-2.4	0.0	121	5.6	-4.8	2.9	67	6.7	-6.2	-2.6			
27	288	5.4	5.1	-1.7	295	4.0	3.6	-1.7	25	2.6	-1.1	-2.4	356	2.8	0.2	-2.8	112	4.8	-4.5	1.8	111	8.1	-7.6	2.9	107	12.3	-11.8	3.6			
28	300	4.8	4.2	-2.4	341	3.1	1.0	-2.9	57	4.0	-3.4	-2.2	73	2.1	-2.0	-0.6	88	3.7	-3.7	-0.1	120	2.8	-2.4	1.4	91	10.5	-10.5	0.1			
29	301	5.7	4.9	-3.0	301	4.3	3.7	-2.2	26	2.8	-1.2	-2.5	31	1.2	-0.6	-1.0	98	2.1	-2.1	0.3	140	7.0	-4.5	5.3	105	13.5	-13.1	3.4			
30	277	3.8	3.8	-0.5	308	4.2	3.3	-2.6	54	1.7	-1.4	-1.0	9	1.2	-0.2	-1.2	90	2.3	-2.3	0.0	131	6.3	-4.8	4.1	45	10.0	-7.1	-7.0			
31	294	3.9	3.6	-1.6	293	3.6	3.3	-1.4	73	1.0	-1.0	-0.3	81	2.6	-2.6	-0.4	127	4.0	-3.2	2.4	126	6.3	-5.1	3.7	89	17.5	-17.5	-0.2			

Daily Normals of Upper Air Winds (1971-2000)

AMINI

JUNE

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	289	6.0	5.7	-2.0	285	5.8	5.6	-1.5	283	1.3	1.3	-0.3	274	1.3	1.3	-0.1	86	4.5	-4.5	-0.3	126	4.2	-3.4	2.5	108	17.1	-16.2	5.4			
2	292	5.4	5.0	-2.0	296	5.9	5.3	-2.6	293	3.0	2.8	-1.2	258	2.5	2.4	0.5	90	6.7	-6.7	0.0	96	7.9	-7.9	0.8	93	23.5	-23.5	1.2			
3	277	7.0	7.0	-0.8	270	7.0	7.0	0.0	264	2.7	2.7	0.3	234	4.1	3.3	2.4	114	3.2	-2.9	1.3	89	7.1	-7.1	-0.1	100	24.2	-23.8	4.4			
4	285	5.8	5.6	-1.5	300	6.8	5.9	-3.4	314	3.5	2.5	-2.4	263	2.5	2.5	0.3	107	1.7	-1.6	0.5	97	10.5	-10.4	1.3	89	22.9	-22.9	-0.2			
5	284	8.9	8.6	-2.2	279	9.9	9.8	-1.5	278	4.8	4.7	-0.7	266	4.1	4.1	0.3	76	4.6	-4.5	-1.1	97	13.5	-13.4	1.6	—	—	—	—			
6	274	6.8	6.8	-0.5	277	9.4	9.3	-1.1	267	6.3	6.3	0.3	246	4.4	4.0	1.8	94	4.6	-4.6	0.3	61	10.4	-9.1	-5.0	95	26.8	-26.7	2.3			
7	267	9.0	9.0	0.4	277	10.5	10.4	-1.2	273	6.7	6.7	-0.3	261	3.8	3.8	0.6	85	5.3	-5.3	-0.5	84	12.6	-12.5	-1.3	104	17.2	-16.7	4.1			
8	272	8.1	8.1	-0.3	276	9.9	9.8	-1.1	275	6.8	6.8	-0.6	249	2.8	2.6	1.0	85	6.8	-6.8	-0.6	90	9.7	-9.7	0.0	94	18.9	-18.9	1.2			
9	277	5.6	5.6	-0.7	277	10.3	10.2	-1.3	291	8.3	7.7	-3.0	269	5.1	5.1	0.1	93	3.4	-3.4	0.2	91	13.5	-13.5	0.3	98	23.2	-23.0	3.2			
10	275	7.7	7.7	-0.7	285	12.4	12.0	-3.3	285	7.2	6.9	-1.9	256	3.8	3.7	0.9	98	9.0	-8.9	1.3	72	12.0	-11.4	-3.6	86	19.4	-19.4	-1.2			
11	292	9.7	9.0	-3.6	282	11.3	11.0	-2.4	287	6.7	6.4	-1.9	265	5.0	5.0	0.4	103	5.5	-5.4	1.2	87	13.0	-13.0	-0.6	76	11.0	-10.7	-2.7			
12	299	11.0	9.6	-5.4	285	11.6	11.2	-3.0	284	7.4	7.2	-1.8	278	6.4	6.3	-0.9	103	2.2	-2.1	0.5	97	7.6	-7.5	0.9	102	29.2	-28.6	5.9			
13	285	12.1	11.7	-3.2	288	10.9	10.4	-3.4	293	8.3	7.7	-3.2	267	6.7	6.7	0.4	58	3.4	-2.9	-1.8	86	12.9	-12.9	-1.0	82	18.4	-18.2	-2.5			
14	277	13.0	12.9	-1.6	282	11.9	11.6	-2.5	278	9.0	8.9	-1.2	226	6.1	4.4	4.2	79	6.1	-6.0	-1.2	75	14.1	-13.6	-3.6	93	18.0	-18.0	0.9			
15	273	12.9	12.9	-0.7	276	13.5	13.4	-1.4	276	10.4	10.3	-1.1	270	9.0	9.0	0.0	90	2.3	-2.3	0.0	68	15.4	-14.3	-5.7	81	26.4	-26.1	-4.1			
16	264	12.4	12.3	1.4	276	13.7	13.6	-1.4	270	12.2	12.2	-0.1	258	8.8	8.6	1.9	75	6.8	-6.6	-1.8	77	16.6	-16.2	-3.7	90	21.0	-21.0	0.0			
17	265	12.8	12.7	1.2	276	13.5	13.4	-1.3	273	11.6	11.6	-0.6	258	10.6	10.4	2.2	86	6.3	-6.3	-0.4	73	16.2	-15.5	-4.6	105	30.9	-29.9	7.8			
18	258	15.3	14.9	3.3	272	15.1	15.1	-0.4	266	10.9	10.9	0.8	244	8.7	7.8	3.8	94	6.6	-6.6	0.5	81	16.9	-16.7	-2.7	72	37.9	-36.1	-11.7			
19	264	12.8	12.7	1.3	280	13.6	13.4	-2.3	277	11.6	11.5	-1.4	269	8.0	8.0	0.2	63	5.1	-4.6	-2.3	82	15.6	-15.4	-2.2	85	27.9	-27.8	-2.4			
20	270	12.9	12.9	-0.1	283	12.3	12.0	-2.7	286	12.4	11.9	-3.5	286	7.8	7.5	-2.1	93	6.7	-6.7	0.3	84	21.9	-21.8	-2.4	97	27.8	-27.6	3.5			
21	276	11.6	11.5	-1.2	280	12.6	12.4	-2.1	279	10.3	10.2	-1.6	269	7.5	7.5	0.1	96	7.1	-7.1	0.8	93	18.8	-18.8	0.9	88	24.8	-24.8	-1.0			
22	279	12.0	11.8	-1.9	286	12.0	11.5	-3.4	292	9.3	8.6	-3.5	278	8.2	8.1	-1.2	90	4.1	-4.1	0.0	95	17.3	-17.2	1.5	120	28.0	-24.2	14.0			
23	290	7.7	7.3	-2.6	283	11.9	11.6	-2.7	293	8.7	8.0	-3.4	284	6.8	6.6	-1.6	99	3.0	-3.0	0.5	74	17.5	-16.9	-4.7	68	37.4	-34.6	-14.3			
24	289	9.0	8.5	-3.0	280	12.7	12.5	-2.2	283	8.9	8.7	-2.0	242	4.0	3.5	1.9	83	8.3	-8.2	-1.0	91	23.1	-23.1	0.5	105	26.8	-25.9	6.8			
25	295	6.9	6.3	-2.9	281	12.4	12.2	-2.3	283	8.6	8.4	-1.9	257	3.9	3.8	0.9	94	8.6	-8.6	0.6	99	18.9	-18.7	2.9	106	34.9	-33.6	9.6			
26	283	9.6	9.4	-2.1	282	12.1	11.8	-2.5	283	8.0	7.8	-1.8	287	2.4	2.3	-0.7	107	7.7	-7.3	2.3	89	21.2	-21.2	-0.2	94	30.5	-30.4	2.1			
27	275	9.6	9.6	-0.9	277	13.0	12.9	-1.5	280	10.0	9.9	-1.7	279	5.3	5.2	-0.8	94	8.2	-8.2	0.6	85	19.1	-19.0	-1.5	86	30.5	-30.4	-1.9			
28	270	12.2	12.2	0.1	274	13.9	13.9	-1.0	270	9.3	9.3	0.0	243	5.1	4.5	2.3	91	8.7	-8.7	0.2	86	17.9	-17.9	-1.1	81	23.1	-22.8	-3.8			
29	280	11.4	11.2	-2.0	280	13.0	12.8	-2.3	286	10.6	10.2	-2.9	259	3.8	3.7	0.7	117	9.6	-8.6	4.3	87	20.6	-20.6	-1.1	98	42.0	-41.6	5.8			
30	272	12.8	12.8	-0.4	278	12.7	12.6	-1.8	282	10.0	9.8	-2.0	289	2.8	2.6	-0.9	91	9.7	-9.7	0.1	88	22.2	-22.2	-0.7	94	25.0	-24.9	1.7			

Daily Normals of Upper Air Winds (1971-2000)

31

AMINI

JULY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	286	15.9	15.2	-4.5	280	14.4	14.2	-2.5	282	10.8	10.6	-2.3	273	3.5	3.5	-0.2	96	10.0	-10.0	1.0	88	20.5	-20.5	-0.8	92	26.3	-26.3	0.9			
2	284	11.6	11.3	-2.8	285	11.9	11.5	-3.0	281	9.0	8.8	-1.7	278	2.2	2.2	-0.3	100	11.3	-11.1	1.9	93	18.7	-18.7	0.9	87	40.7	-40.7	-1.9			
3	285	11.8	11.4	-3.1	283	11.5	11.2	-2.5	283	10.1	9.8	-2.3	254	2.5	2.4	0.7	89	10.0	-10.0	-0.1	91	25.6	-25.6	0.6	85	27.9	-27.8	-2.5			
4	294	11.2	10.2	-4.6	288	12.0	11.4	-3.6	285	5.8	5.6	-1.5	281	3.1	3.0	-0.6	89	8.3	-8.3	-0.2	96	25.9	-25.8	2.5	99	31.9	-31.5	5.2			
5	281	11.0	10.8	-2.1	285	11.2	10.8	-2.8	274	6.5	6.5	-0.5	225	0.1	0.1	0.1	85	8.7	-8.7	-0.7	93	23.2	-23.2	1.4	93	30.3	-30.3	1.4			
6	294	8.0	7.3	-3.2	284	10.4	10.1	-2.6	276	6.5	6.5	-0.7	345	3.0	0.8	-2.9	96	7.2	-7.2	0.8	93	22.6	-22.6	1.3	95	31.4	-31.3	2.9			
7	283	14.0	13.7	-3.1	286	12.9	12.4	-3.6	292	8.7	8.1	-3.2	278	3.0	3.0	-0.4	100	11.4	-11.2	2.0	93	22.3	-22.3	1.1	81	25.5	-25.2	-4.1			
8	270	12.2	12.2	0.0	285	13.9	13.5	-3.5	286	9.3	8.9	-2.6	319	3.0	2.0	-2.3	88	9.3	-9.3	-0.3	88	26.6	-26.6	-0.9	85	28.4	-28.3	-2.3			
9	273	14.7	14.7	-0.7	290	12.7	11.9	-4.4	283	8.2	8.0	-1.9	257	3.5	3.4	0.8	88	6.9	-6.9	-0.2	89	21.3	-21.3	-0.5	94	30.9	-30.8	2.2			
10	273	14.0	14.0	-0.8	284	13.5	13.1	-3.2	286	10.7	10.3	-2.9	292	3.5	3.2	-1.3	75	8.6	-8.3	-2.2	84	21.1	-21.0	-2.1	—	—	—	—			
11	275	15.1	15.1	-1.2	286	16.0	15.4	-4.4	279	11.1	11.0	-1.8	310	1.6	1.2	-1.0	98	6.9	-6.8	0.9	88	22.1	-22.1	-0.8	86	27.2	-27.1	-1.7			
12	268	17.2	17.2	0.6	285	14.0	13.5	-3.6	285	9.9	9.6	-2.5	303	5.0	4.2	-2.7	87	6.7	-6.7	-0.3	78	16.0	-15.7	-3.2	93	34.9	-34.9	1.8			
13	271	15.7	15.7	-0.3	283	16.1	15.7	-3.7	282	11.0	10.8	-2.2	279	5.1	5.0	-0.8	103	6.8	-6.6	1.5	92	17.6	-17.6	0.6	—	—	—	—			
14	272	14.2	14.2	-0.5	284	14.6	14.2	-3.5	288	10.3	9.8	-3.1	280	5.9	5.8	-1.0	95	7.5	-7.5	0.6	105	20.1	-19.4	5.1	97	42.5	-42.2	5.0			
15	269	14.9	14.9	0.3	287	13.6	13.0	-4.0	286	10.2	9.8	-2.9	223	1.6	1.1	1.2	88	10.0	-10.0	-0.3	80	18.7	-18.4	-3.2	96	22.3	-22.2	2.3			
16	260	16.0	15.7	2.9	281	15.4	15.1	-2.9	284	10.0	9.7	-2.4	273	5.7	5.7	-0.3	94	7.4	-7.4	0.5	92	20.1	-20.1	0.8	82	39.3	-38.9	-5.7			
17	263	12.9	12.8	1.6	280	14.2	14.0	-2.4	276	10.1	10.1	-1.0	274	5.1	5.1	-0.4	89	10.0	-10.0	-0.1	81	21.0	-20.7	-3.4	81	40.7	-40.2	-6.2			
18	265	15.6	15.5	1.4	281	15.4	15.1	-2.9	279	10.5	10.4	-1.6	270	2.7	2.7	0.0	99	11.2	-11.1	1.8	88	19.2	-19.2	-0.7	76	33.0	-32.0	-8.0			
19	261	18.3	18.1	3.0	284	14.0	13.6	-3.4	288	8.3	7.9	-2.6	92	3.1	-3.1	0.1	85	13.4	-13.3	-1.2	90	19.2	-19.2	-0.1	90	33.4	-33.4	0.2			
20	277	18.5	18.4	-2.3	287	13.3	12.7	-3.8	297	8.5	7.5	-3.9	288	2.5	2.4	-0.8	88	9.2	-9.2	-0.4	91	17.8	-17.8	0.3	92	45.7	-45.7	1.5			
21	280	10.9	10.7	-1.8	286	13.2	12.7	-3.7	288	10.3	9.8	-3.1	297	4.6	4.1	-2.1	91	8.6	-8.6	0.2	81	19.6	-19.4	-3.0	92	42.4	-42.4	1.8			
22	279	12.3	12.2	-1.9	287	14.1	13.5	-4.2	288	10.4	9.9	-3.3	298	3.6	3.2	-1.7	85	8.0	-8.0	-0.7	92	24.4	-24.4	0.7	95	28.5	-28.4	2.5			
23	278	13.4	13.3	-1.8	289	16.3	15.4	-5.2	286	11.4	10.9	-3.2	278	4.3	4.3	-0.6	90	6.4	-6.4	0.0	92	23.5	-23.5	0.8	97	29.4	-29.2	3.6			
24	283	12.4	12.1	-2.7	288	13.8	13.1	-4.3	296	10.8	9.7	-4.8	240	2.8	2.4	1.4	100	12.5	-12.3	2.2	81	17.7	-17.5	-2.7	119	26.3	-23.1	12.6			
25	272	17.3	17.3	-0.6	287	14.1	13.5	-4.1	295	10.7	9.7	-4.6	290	4.0	3.8	-1.4	115	11.7	-10.6	4.9	90	23.7	-23.7	0.0	90	25.0	-25.0	0.0			
26	265	16.1	16.0	1.3	284	15.1	14.6	-3.7	280	9.7	9.6	-1.7	248	3.8	3.5	1.4	94	6.6	-6.6	0.5	89	24.1	-24.1	-0.4	87	35.6	-35.5	-2.1			
27	281	16.2	15.9	-3.2	288	14.1	13.4	-4.4	285	9.5	9.2	-2.5	268	4.7	4.7	0.2	88	9.5	-9.5	-0.3	88	24.0	-24.0	-1.0	83	29.5	-29.3	-3.6			
28	280	16.5	16.2	-3.0	293	13.6	12.5	-5.4	290	9.9	9.3	-3.4	279	4.3	4.2	-0.7	92	7.6	-7.6	0.2	90	22.6	-22.6	0.0	102	29.9	-29.3	6.0			
29	284	13.3	12.9	-3.2	292	11.2	10.4	-4.2	289	8.0	7.6	-2.6	322	1.8	1.1	-1.4	102	8.8	-8.6	1.9	91	21.2	-21.2	0.3	95	22.6	-22.5	2.0			
30	280	12.6	12.4	-2.2	283	11.8	11.5	-2.6	280	7.7	7.6	-1.3	301	2.9	2.5	-1.5	100	11.8	-11.6	2.0	101	25.8	-25.3	5.1	81	26.9	-26.6	-4.1			
31	287	16.6	15.9	-4.9	288	12.8	12.2	-4.0	284	9.2	8.9	-2.2	276	6.0	6.0	-0.6	93	11.0	-11.0	0.6	83	22.4	-22.2	-2.9	94	26.8	-26.7	1.7			

Daily Normals of Upper Air Winds (1971-2000)

AMINI

AUGUST

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	279	16.2	16.0	-2.6	287	14.8	14.2	-4.3	288	10.0	9.5	-3.0	299	4.8	4.2	-2.3	83	7.3	-7.2	-0.9	84	21.4	-21.3	-2.2	87	20.9	-20.9	-1.2			
2	282	13.4	13.1	-2.9	291	14.1	13.1	-5.1	294	9.8	8.9	-4.0	276	1.8	1.8	-0.2	96	7.7	-7.7	0.8	89	17.0	-17.0	-0.4	91	26.7	-26.7	0.5			
3	277	14.2	14.1	-1.7	287	14.4	13.7	-4.3	286	9.3	9.0	-2.5	207	2.0	0.9	1.8	91	8.6	-8.6	0.1	88	23.3	-23.3	-1.0	80	31.0	-30.5	-5.5			
4	279	9.7	9.6	-1.6	287	12.3	11.8	-3.6	281	7.5	7.4	-1.4	253	2.4	2.3	0.7	91	9.4	-9.4	0.1	88	23.8	-23.8	-0.7	81	24.6	-24.3	-3.8			
5	288	10.2	9.7	-3.2	294	10.8	9.9	-4.4	279	8.0	7.9	-1.2	340	2.9	1.0	-2.7	85	9.0	-9.0	-0.8	97	23.5	-23.3	2.7	86	35.8	-35.7	-2.2			
6	302	9.5	8.1	-5.0	299	9.2	8.0	-4.5	293	5.8	5.3	-2.3	320	2.5	1.6	-1.9	95	7.5	-7.5	0.7	91	22.9	-22.9	0.3	87	19.2	-19.2	-1.0			
7	309	9.0	7.0	-5.7	299	11.9	10.4	-5.7	297	6.9	6.2	-3.1	268	2.9	2.9	0.1	103	9.5	-9.3	2.1	98	24.0	-23.8	3.2	104	26.0	-25.2	6.3			
8	307	12.4	9.9	-7.5	294	13.1	12.0	-5.3	285	8.6	8.3	-2.3	262	5.5	5.4	0.8	85	9.5	-9.5	-0.9	86	19.0	-18.9	-1.4	82	27.2	-26.9	-3.8			
9	286	8.7	8.4	-2.4	289	11.4	10.8	-3.7	285	8.3	8.0	-2.1	304	4.0	3.3	-2.2	104	5.9	-5.7	1.4	87	20.2	-20.2	-1.1	81	37.0	-36.5	-5.8			
10	269	9.2	9.2	0.1	283	12.1	11.8	-2.7	283	8.2	8.0	-1.9	257	3.9	3.8	0.9	93	7.0	-7.0	0.4	93	16.4	-16.4	0.9	94	26.9	-26.8	2.1			
11	267	11.5	11.5	0.6	285	13.8	13.3	-3.5	288	9.7	9.2	-3.0	292	4.6	4.3	-1.7	97	4.1	-4.1	0.5	83	16.4	-16.3	-1.9	88	26.4	-26.4	-0.9			
12	284	12.7	12.3	-3.0	290	13.8	12.9	-4.8	287	8.7	8.3	-2.5	320	1.6	1.0	-1.2	90	9.5	-9.5	0.0	95	18.3	-18.2	1.5	79	24.4	-24.0	-4.6			
13	280	10.1	9.9	-1.8	286	12.9	12.4	-3.6	291	10.2	9.5	-3.6	283	3.6	3.5	-0.8	103	7.0	-6.8	1.6	88	22.2	-22.2	-0.8	87	24.6	-24.6	-1.4			
14	284	9.2	8.9	-2.3	293	12.1	11.1	-4.7	284	8.8	8.5	-2.1	272	2.8	2.8	-0.1	99	14.0	-13.8	2.3	92	21.5	-21.5	0.9	90	25.3	-25.3	0.1			
15	280	10.0	9.8	-1.8	287	12.8	12.3	-3.7	289	10.5	9.9	-3.4	296	3.2	2.9	-1.4	91	8.6	-8.6	0.1	94	19.7	-19.6	1.5	92	28.0	-28.0	1.0			
16	280	10.0	9.8	-1.8	293	14.2	13.1	-5.5	300	9.8	8.5	-4.9	267	3.6	3.6	0.2	87	9.6	-9.6	-0.5	95	23.7	-23.6	1.9	84	36.9	-36.7	-3.9			
17	277	9.9	9.8	-1.2	290	12.1	11.4	-4.2	283	10.3	10.0	-2.4	286	3.3	3.2	-0.9	98	10.8	-10.7	1.5	92	20.5	-20.5	0.8	—	—	—	—			
18	275	12.6	12.6	-1.1	293	12.8	11.8	-5.0	288	10.0	9.5	-3.0	287	4.2	4.0	-1.2	92	11.6	-11.6	0.4	98	21.4	-21.2	2.8	116	21.5	-19.3	9.4			
19	274	11.8	11.8	-0.9	296	12.7	11.5	-5.5	290	9.1	8.6	-3.1	268	3.7	3.7	0.1	86	8.6	-8.6	-0.6	102	21.2	-20.8	4.3	94	33.0	-32.9	2.3			
20	273	11.9	11.9	-0.7	289	12.8	12.1	-4.1	283	8.4	8.2	-1.9	250	2.9	2.7	1.0	97	9.2	-9.1	1.1	95	21.3	-21.2	2.0	110	28.5	-26.8	9.6			
21	272	10.3	10.3	-0.4	294	11.3	10.3	-4.6	294	9.1	8.3	-3.7	296	4.6	4.1	-2.0	104	9.5	-9.2	2.3	104	23.2	-22.5	5.5	87	20.0	-20.0	-1.0			
22	290	12.2	11.5	-4.1	300	10.9	9.4	-5.5	293	8.8	8.1	-3.4	284	2.9	2.8	-0.7	104	9.3	-9.0	2.2	100	23.1	-22.7	4.1	88	15.0	-15.0	-0.5			
23	291	11.3	10.5	-4.1	299	11.4	9.9	-5.6	295	8.6	7.8	-3.7	252	1.6	1.5	0.5	96	11.2	-11.1	1.1	95	19.6	-19.5	1.8	102	30.8	-30.1	6.3			
24	294	10.7	9.8	-4.3	297	11.3	10.1	-5.1	284	7.7	7.5	-1.9	274	1.3	1.3	-0.1	102	12.2	-11.9	2.5	100	25.8	-25.4	4.6	92	22.2	-22.2	0.8			
25	289	9.7	9.2	-3.1	298	10.3	9.1	-4.8	285	7.2	6.9	-1.9	275	3.3	3.3	-0.3	99	11.3	-11.2	1.7	102	25.9	-25.3	5.4	100	38.0	-37.4	6.6			
26	278	9.6	9.5	-1.4	296	9.8	8.8	-4.3	277	6.9	6.9	-0.8	270	1.5	1.5	0.0	79	9.5	-9.3	-1.8	98	21.8	-21.6	3.0	103	31.5	-30.7	6.9			
27	274	11.3	11.3	-0.8	291	9.6	8.9	-3.5	282	7.6	7.4	-1.6	309	3.8	3.0	-2.4	98	10.0	-9.9	1.4	103	20.3	-19.8	4.5	96	20.0	-19.9	2.1			
28	283	11.6	11.3	-2.7	296	9.5	8.5	-4.2	287	7.3	7.0	-2.2	304	2.5	2.1	-1.4	101	6.5	-6.4	1.3	91	18.1	-18.1	0.3	70	26.0	-24.4	-8.9			
29	282	11.4	11.2	-2.3	297	9.5	8.5	-4.3	296	7.8	7.0	-3.4	299	3.5	3.1	-1.7	101	6.9	-6.8	1.3	91	19.6	-19.6	0.4	94	17.9	-17.9	1.2			
30	271	14.3	14.3	-0.3	299	10.8	9.5	-5.2	290	8.4	7.9	-2.9	279	3.6	3.6	-0.6	100	7.8	-7.7	1.4	93	21.5	-21.5	1.1	96	24.0	-23.8	2.7			
31	290	13.4	12.6	-4.6	303	7.4	6.2	-4.1	293	6.3	5.8	-2.5	283	2.3	2.2	-0.5	106	10.0	-9.6	2.7	100	20.5	-20.2	3.6	101	19.0	-18.6	3.7			

Daily Normals of Upper Air Winds (1971-2000)

AMINI

SEPTEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	295	14.0	12.6	-6.0	311	7.3	5.5	-4.8	297	5.6	5.0	-2.5	247	2.3	2.1	0.9	108	11.1	-10.5	3.5	100	24.5	-24.2	4.1	—	—	—	—			
2	286	11.2	10.8	-3.1	298	9.4	8.3	-4.4	283	4.5	4.4	-1.0	135	0.7	-0.5	0.5	97	9.1	-9.0	1.1	96	20.8	-20.7	2.1	100	21.7	-21.4	3.8			
3	271	13.6	13.6	-0.3	291	8.3	7.7	-3.0	279	4.9	4.8	-0.8	112	0.5	-0.5	0.2	106	11.9	-11.4	3.3	99	23.4	-23.1	3.5	100	21.1	-20.8	3.6			
4	279	11.8	11.7	-1.8	292	8.7	8.0	-3.3	285	5.3	5.1	-1.4	191	0.5	0.1	0.5	105	9.0	-8.7	2.4	93	22.6	-22.6	1.2	94	23.9	-23.8	1.7			
5	283	11.8	11.5	-2.6	293	7.6	7.0	-3.0	284	5.8	5.6	-1.4	315	0.7	0.5	-0.5	93	9.9	-9.9	0.5	96	19.7	-19.6	1.9	101	25.9	-25.4	5.1			
6	286	10.2	9.8	-2.8	294	8.0	7.3	-3.3	292	5.9	5.5	-2.2	295	1.7	1.5	-0.7	108	7.8	-7.4	2.4	92	18.2	-18.2	0.5	89	20.4	-20.4	-0.5			
7	281	9.6	9.4	-1.9	298	7.3	6.5	-3.4	286	6.6	6.4	-1.8	293	2.8	2.6	-1.1	95	7.3	-7.3	0.6	89	17.2	-17.2	-0.3	90	27.0	-27.0	0.0			
8	290	8.1	7.6	-2.8	302	7.0	5.9	-3.7	289	6.9	6.5	-2.3	273	1.8	1.8	-0.1	95	9.5	-9.5	0.8	97	18.6	-18.5	2.3	96	27.0	-26.9	2.8			
9	307	8.3	6.6	-5.0	310	7.8	6.0	-5.0	302	6.5	5.5	-3.5	299	3.3	2.9	-1.6	101	9.3	-9.1	1.8	108	17.9	-17.0	5.5	111	15.0	-14.0	5.4			
10	301	8.2	7.0	-4.2	310	9.4	7.2	-6.0	283	5.2	5.1	-1.2	347	1.8	0.4	-1.8	96	6.6	-6.6	0.7	99	20.7	-20.4	3.3	97	25.6	-25.4	2.9			
11	301	6.9	5.9	-3.5	307	8.6	6.9	-5.2	295	5.9	5.3	-2.5	180	0.8	0.0	0.8	92	8.1	-8.1	0.3	110	20.0	-18.8	6.8	104	24.5	-23.8	5.9			
12	308	6.8	5.4	-4.2	307	8.1	6.4	-4.9	297	4.2	3.8	-1.9	225	0.6	0.4	0.4	114	8.0	-7.3	3.3	100	15.0	-14.8	2.6	93	15.7	-15.7	0.9			
13	305	7.3	6.0	-4.2	308	7.5	5.9	-4.6	282	3.5	3.4	-0.7	305	1.6	1.3	-0.9	107	7.9	-7.6	2.3	109	15.2	-14.4	5.0	107	25.1	-24.0	7.5			
14	307	7.4	5.9	-4.5	311	6.3	4.8	-4.1	299	2.6	2.3	-1.3	304	1.1	0.9	-0.6	98	6.3	-6.2	0.9	97	16.6	-16.5	1.9	98	17.5	-17.3	2.4			
15	297	6.5	5.8	-2.9	297	5.9	5.2	-2.7	290	2.9	2.7	-1.0	80	2.3	-2.3	-0.4	93	8.2	-8.2	0.5	102	17.1	-16.7	3.7	81	15.0	-14.8	-2.3			
16	331	6.0	2.9	-5.2	317	5.0	3.4	-3.6	315	1.7	1.2	-1.2	94	2.7	-2.7	0.2	86	7.7	-7.7	-0.6	91	15.4	-15.4	0.3	—	—	—	—			
17	319	7.4	4.9	-5.6	307	6.4	5.1	-3.9	303	3.5	2.9	-1.9	65	1.7	-1.5	-0.7	100	7.7	-7.6	1.4	109	19.5	-18.4	6.4	83	12.0	-11.9	-1.5			
18	297	5.6	5.0	-2.5	297	7.8	7.0	-3.5	283	4.1	4.0	-0.9	58	0.9	-0.8	-0.5	108	6.0	-5.7	1.9	88	17.5	-17.5	-0.5	102	19.0	-18.6	4.0			
19	299	6.5	5.7	-3.2	304	6.6	5.5	-3.7	281	5.1	5.0	-1.0	354	0.9	0.1	-0.9	98	7.9	-7.8	1.1	100	16.7	-16.5	2.8	75	15.0	-14.5	-3.9			
20	307	6.8	5.4	-4.1	294	8.5	7.7	-3.5	282	6.3	6.2	-1.3	275	2.2	2.2	-0.2	95	8.8	-8.8	0.8	96	15.3	-15.2	1.5	91	18.9	-18.9	0.4			
21	316	7.6	5.3	-5.4	298	7.2	6.3	-3.4	295	5.9	5.3	-2.5	315	0.8	0.6	-0.6	100	8.8	-8.7	1.5	95	16.9	-16.8	1.4	95	10.1	-10.1	0.8			
22	307	7.9	6.3	-4.8	302	8.0	6.8	-4.2	299	5.7	5.0	-2.8	315	2.0	1.4	-1.4	91	8.4	-8.4	0.1	91	14.3	-14.3	0.2	113	16.5	-15.2	6.5			
23	297	5.9	5.2	-2.7	296	5.9	5.3	-2.6	287	5.0	4.8	-1.5	333	1.1	0.5	-1.0	98	6.6	-6.5	0.9	99	13.7	-13.5	2.2	95	21.4	-21.3	2.0			
24	296	4.6	4.1	-2.0	294	6.0	5.5	-2.4	293	4.3	4.0	-1.7	307	1.0	0.8	-0.6	106	8.1	-7.8	2.3	107	17.9	-17.2	5.1	127	12.0	-9.6	7.2			
25	288	4.3	4.1	-1.3	286	4.4	4.2	-1.2	282	2.9	2.8	-0.6	315	0.1	0.1	-0.1	113	8.9	-8.2	3.5	99	19.4	-19.2	3.0	104	12.8	-12.4	3.2			
26	312	4.8	3.6	-3.2	303	5.0	4.2	-2.7	281	4.1	4.0	-0.8	189	0.6	0.1	0.6	98	6.9	-6.8	1.0	90	15.1	-15.1	0.0	91	17.7	-17.7	0.4			
27	319	5.5	3.6	-4.2	304	4.7	3.9	-2.6	286	2.6	2.5	-0.7	236	0.4	0.3	0.2	97	6.7	-6.7	0.8	113	16.4	-15.1	6.3	101	23.4	-23.0	4.4			
28	280	6.0	5.9	-1.0	296	5.5	4.9	-2.4	289	4.6	4.3	-1.5	138	1.5	-1.0	1.1	102	9.4	-9.2	1.9	103	19.7	-19.2	4.3	98	17.0	-16.8	2.4			
29	321	4.1	2.6	-3.2	316	5.8	4.0	-4.2	299	4.7	4.1	-2.3	131	0.9	-0.7	0.6	102	5.5	-5.4	1.1	95	11.3	-11.3	1.0	89	16.0	-16.0	-0.3			
30	280	6.2	6.1	-1.1	314	3.5	2.5	-2.4	339	2.2	0.8	-2.1	137	2.1	-1.4	1.5	92	7.0	-7.0	0.3	92	12.9	-12.9	0.5	60	18.0	-15.6	-9.0			

Daily Normals of Upper Air Winds (1971-2000)

AMINI

OCTOBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	278	3.5	3.5	-0.5	299	4.9	4.3	-2.4	301	3.1	2.7	-1.6	202	0.5	0.2	0.5	115	7.7	-7.0	3.3	102	18.9	-18.5	3.9	102	20.5	-20.0	4.3			
2	288	2.9	2.8	-0.9	295	4.0	3.6	-1.7	305	1.9	1.6	-1.1	338	1.8	0.7	-1.7	92	7.1	-7.1	0.2	97	15.8	-15.7	2.0	102	24.0	-23.5	5.0			
3	278	6.3	6.2	-0.9	296	5.8	5.2	-2.5	286	3.6	3.5	-1.0	48	2.8	-2.1	-1.9	116	8.8	-7.9	3.8	108	14.5	-13.8	4.4	71	14.5	-13.7	-4.6			
4	272	2.6	2.6	-0.1	316	4.3	3.0	-3.1	300	3.6	3.1	-1.8	342	0.9	0.3	-0.9	103	4.1	-4.0	0.9	83	13.1	-13.0	-1.6	69	12.0	-11.2	-4.4			
5	293	4.7	4.3	-1.8	301	5.7	4.9	-2.9	308	4.3	3.4	-2.7	264	1.0	1.0	0.1	90	5.3	-5.3	0.0	95	10.0	-10.0	0.8	71	15.0	-14.2	-4.8			
6	286	5.7	5.5	-1.6	291	4.8	4.5	-1.7	287	3.4	3.2	-1.0	265	2.1	2.1	0.2	73	2.8	-2.7	-0.8	93	14.8	-14.8	0.8	95	8.9	-8.9	0.8			
7	316	6.9	4.8	-5.0	317	4.1	2.8	-3.0	308	2.9	2.3	-1.8	303	1.7	1.4	-0.9	114	4.4	-4.0	1.8	115	13.0	-11.8	5.5	101	15.0	-14.7	2.9			
8	342	4.9	1.5	-4.7	320	3.0	1.9	-2.3	342	1.9	0.6	-1.8	58	1.3	-1.1	-0.7	96	4.9	-4.9	0.5	104	12.9	-12.5	3.1	109	14.0	-13.2	4.6			
9	320	2.6	1.7	-2.0	310	0.8	0.6	-0.5	325	1.2	0.7	-1.0	360	0.9	0.0	-0.9	104	4.2	-4.1	1.0	88	10.3	-10.3	-0.3	75	8.2	-7.9	-2.1			
10	292	9.4	8.7	-3.5	325	2.8	1.6	-2.3	294	2.0	1.8	-0.8	270	1.4	1.4	0.0	98	5.0	-5.0	0.7	90	8.0	-8.0	0.0	99	14.5	-14.3	2.3			
11	273	7.6	7.6	-0.4	308	2.8	2.2	-1.7	270	0.9	0.9	0.0	96	1.0	-1.0	0.1	109	5.6	-5.3	1.8	101	11.2	-11.0	2.2	112	7.9	-7.3	3.0			
12	275	5.2	5.2	-0.5	270	0.2	0.2	0.0	51	0.6	-0.5	-0.4	84	2.0	-2.0	-0.2	117	3.5	-3.1	1.6	114	6.6	-6.0	2.7	152	2.7	-1.3	2.4			
13	240	4.3	3.7	2.1	304	1.1	0.9	-0.6	349	1.0	0.2	-1.0	132	3.0	-2.2	2.0	86	4.6	-4.6	-0.3	108	7.9	-7.5	2.5	—	—	—	—			
14	267	3.4	3.4	0.2	345	1.1	0.3	-1.1	261	0.6	0.6	0.1	56	0.7	-0.6	-0.4	142	2.3	-1.4	1.8	109	11.7	-11.1	3.8	61	12.0	-10.5	-5.8			
15	272	2.3	2.3	-0.1	11	1.0	-0.2	-1.0	346	1.2	0.3	-1.2	62	2.1	-1.9	-1.0	102	3.3	-3.2	0.7	123	9.3	-7.8	5.0	90	8.5	-8.5	0.0			
16	279	2.6	2.6	-0.4	340	2.3	0.8	-2.2	9	0.6	-0.1	-0.6	45	2.8	-2.0	-2.0	142	1.6	-1.0	1.3	139	6.4	-4.2	4.8	65	8.1	-7.3	-3.4			
17	299	2.3	2.0	-1.1	339	1.7	0.6	-1.6	233	1.0	0.8	0.6	73	2.4	-2.3	-0.7	106	3.6	-3.5	1.0	132	6.6	-4.9	4.4	112	10.1	-9.4	3.8			
18	326	0.7	0.4	-0.6	7	1.6	-0.2	-1.6	38	1.1	-0.7	-0.9	85	2.4	-2.4	-0.2	125	4.4	-3.6	2.5	107	7.8	-7.5	2.3	147	12.8	-7.0	10.7			
19	51	0.6	-0.5	-0.4	32	1.5	-0.8	-1.3	79	1.6	-1.6	-0.3	100	2.3	-2.3	0.4	80	6.3	-6.2	-1.1	116	7.3	-6.6	3.2	135	11.0	-7.8	7.8			
20	254	0.7	0.7	0.2	23	1.5	-0.6	-1.4	80	1.1	-1.1	-0.2	90	2.2	-2.2	0.0	99	4.6	-4.5	0.7	122	2.5	-2.1	1.3	230	9.9	7.5	6.4			
21	11	0.5	-0.1	-0.5	59	2.3	-2.0	-1.2	114	1.2	-1.1	0.5	144	2.6	-1.5	2.1	119	6.0	-5.2	2.9	113	6.9	-6.3	2.7	41	6.4	-4.2	-4.8			
22	313	2.5	1.8	-1.7	74	1.5	-1.4	-0.4	66	1.0	-0.9	-0.4	91	3.9	-3.9	0.1	124	2.9	-2.4	1.6	115	9.2	-8.3	3.9	93	8.5	-8.5	0.4			
23	356	1.6	0.1	-1.6	41	2.1	-1.4	-1.6	62	1.9	-1.7	-0.9	90	2.1	-2.1	0.0	105	5.2	-5.0	1.3	116	8.5	-7.6	3.7	173	6.8	-0.8	6.8			
24	360	0.9	0.0	-0.9	63	1.3	-1.2	-0.6	98	2.2	-2.2	0.3	99	3.6	-3.6	0.6	138	6.2	-4.2	4.6	130	8.3	-6.4	5.3	139	7.8	-5.1	5.9			
25	29	1.0	-0.5	-0.9	41	2.1	-1.4	-1.6	69	2.2	-2.1	-0.8	89	3.9	-3.9	-0.1	85	5.6	-5.6	-0.5	135	7.8	-5.5	5.5	82	3.0	-3.0	-0.4			
26	336	3.4	1.4	-3.1	354	1.0	0.1	-1.0	36	1.4	-0.8	-1.1	72	1.6	-1.5	-0.5	93	3.6	-3.6	0.2	115	8.9	-8.1	3.8	130	11.2	-8.6	7.1			
27	343	4.5	1.3	-4.3	79	1.5	-1.5	-0.3	83	3.4	-3.4	-0.4	66	3.6	-3.3	-1.5	109	4.9	-4.6	1.6	142	7.3	-4.5	5.8	110	14.0	-13.2	4.8			
28	39	1.4	-0.9	-1.1	117	2.0	-1.8	0.9	95	1.2	-1.2	0.1	108	2.8	-2.7	0.9	115	3.8	-3.4	1.6	128	6.5	-5.1	4.0	255	1.6	1.5	0.4			
29	84	2.8	-2.8	-0.3	118	2.7	-2.4	1.3	117	2.9	-2.6	1.3	75	3.4	-3.3	-0.9	103	2.2	-2.1	0.5	148	5.4	-2.9	4.6	81	5.0	-4.9	-0.8			
30	57	3.1	-2.6	-1.7	58	0.9	-0.8	-0.5	87	1.7	-1.7	-0.1	102	4.0	-3.9	0.8	142	2.3	-1.4	1.8	184	4.6	0.3	4.6	94	10.2	-10.2	0.7			
31	7	1.6	-0.2	-1.6	54	0.9	-0.7	-0.5	85	1.2	-1.2	-0.1	106	2.9	-2.8	0.8	122	4.9	-4.1	2.6	123	8.0	-6.7	4.3	—	—	—	—			

Daily Normals of Upper Air Winds (1971-2000)

AMINI

NOVEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	54	1.7	-1.4	-1.0	72	2.0	-1.9	-0.6	63	0.9	-0.8	-0.4	75	4.2	-4.1	-1.1	103	2.6	-2.5	0.6	147	7.1	-3.9	5.9	110	7.9	-7.4	2.7
2	39	1.3	-0.8	-1.0	46	3.0	-2.2	-2.1	62	2.1	-1.9	-1.0	66	4.8	-4.4	-2.0	106	2.9	-2.8	0.8	137	7.5	-5.1	5.5	75	10.4	-10.0	-2.7
3	81	1.2	-1.2	-0.2	49	1.8	-1.4	-1.2	52	1.1	-0.9	-0.7	60	4.2	-3.6	-2.1	98	0.7	-0.7	0.1	144	10.0	-5.8	8.1	—	—	—	—
4	39	1.3	-0.8	-1.0	90	0.1	-0.1	0.0	360	0.9	0.0	-0.9	66	2.0	-1.8	-0.8	117	3.3	-2.9	1.5	135	9.5	-6.8	6.7	134	5.7	-4.1	4.0
5	4	2.6	-0.2	-2.6	360	0.9	0.0	-0.9	55	1.9	-1.6	-1.1	60	3.8	-3.3	-1.9	141	1.9	-1.2	1.5	158	3.1	-1.2	2.9	118	7.1	-6.3	3.3
6	13	2.3	-0.5	-2.2	68	1.6	-1.5	-0.6	76	3.2	-3.1	-0.8	89	4.0	-4.0	-0.1	114	4.4	-4.0	1.8	120	11.5	-9.9	5.8	131	3.7	-2.8	2.4
7	56	2.9	-2.4	-1.6	85	1.1	-1.1	-0.1	101	1.5	-1.5	0.3	123	3.1	-2.6	1.7	95	3.6	-3.6	0.3	127	8.7	-7.0	5.2	—	—	—	—
8	39	3.5	-2.2	-2.7	23	1.3	-0.5	-1.2	25	2.1	-0.9	-1.9	127	2.0	-1.6	1.2	118	5.4	-4.8	2.5	124	10.5	-8.7	5.9	96	13.0	-12.9	1.4
9	43	4.4	-3.0	-3.2	56	2.7	-2.2	-1.5	53	2.0	-1.6	-1.2	74	4.3	-4.1	-1.2	90	2.8	-2.8	0.0	116	9.0	-8.1	3.9	132	6.4	-4.7	4.3
10	68	3.1	-2.9	-1.2	48	2.4	-1.8	-1.6	58	1.5	-1.3	-0.8	75	3.9	-3.8	-1.0	103	6.4	-6.2	1.4	145	9.2	-5.3	7.5	167	11.0	-2.5	10.7
11	130	3.0	-2.3	1.9	51	2.2	-1.7	-1.4	68	2.7	-2.5	-1.0	75	6.0	-5.8	-1.5	108	5.2	-5.0	1.6	132	7.9	-5.9	5.3	91	10.9	-10.9	0.2
12	54	1.7	-1.4	-1.0	74	1.9	-1.8	-0.5	66	3.0	-2.7	-1.2	86	5.1	-5.1	-0.4	84	6.4	-6.4	-0.7	137	7.4	-5.0	5.4	64	5.7	-5.1	-2.5
13	73	2.4	-2.3	-0.7	79	1.6	-1.6	-0.3	70	1.5	-1.4	-0.5	107	3.1	-3.0	0.9	101	5.4	-5.3	1.0	145	8.3	-4.8	6.8	59	11.1	-9.5	-5.8
14	16	3.5	-1.0	-3.4	48	1.2	-0.9	-0.8	135	0.7	-0.5	0.5	85	2.2	-2.2	-0.2	100	6.2	-6.1	1.1	121	7.2	-6.2	3.7	119	7.1	-6.2	3.4
15	18	2.9	-0.9	-2.8	4	1.6	-0.1	-1.6	72	1.3	-1.2	-0.4	88	2.9	-2.9	-0.1	93	3.9	-3.9	0.2	123	10.5	-8.8	5.8	—	—	—	—
16	346	4.0	1.0	-3.9	8	1.5	-0.2	-1.5	69	0.9	-0.8	-0.3	75	2.3	-2.2	-0.6	102	3.4	-3.3	0.7	138	6.1	-4.1	4.5	112	9.2	-8.6	3.4
17	283	1.8	1.8	-0.4	231	0.6	0.5	0.4	191	0.5	0.1	0.5	92	2.3	-2.3	0.1	122	3.6	-3.0	1.9	121	4.7	-4.0	2.4	173	3.1	-0.4	3.1
18	11	2.0	-0.4	-2.0	55	1.9	-1.6	-1.1	93	2.0	-2.0	0.1	95	3.4	-3.4	0.3	160	3.5	-1.2	3.3	130	3.5	-2.7	2.3	120	2.0	-1.7	1.0
19	352	2.9	0.4	-2.9	43	1.6	-1.1	-1.2	94	1.3	-1.3	0.1	67	2.8	-2.6	-1.1	273	1.9	1.9	-0.1	184	6.5	0.5	6.5	157	7.5	-2.9	6.9
20	13	1.8	-0.4	-1.8	65	1.9	-1.7	-0.8	61	2.1	-1.8	-1.0	65	3.1	-2.8	-1.3	209	2.3	1.1	2.0	217	5.5	3.3	4.4	60	7.0	-6.1	-3.5
21	7	3.2	-0.4	-3.2	43	2.3	-1.6	-1.7	360	1.0	0.0	-1.0	60	2.8	-2.4	-1.4	322	1.6	1.0	-1.3	189	3.7	0.6	3.7	132	2.7	-2.0	1.8
22	53	2.5	-2.0	-1.5	59	2.6	-2.2	-1.3	68	3.2	-3.0	-1.2	73	1.0	-1.0	-0.3	186	3.0	0.3	3.0	223	5.2	3.6	3.8	32	4.4	-2.3	-3.7
23	80	2.7	-2.7	-0.5	45	2.4	-1.7	-1.7	47	2.6	-1.9	-1.8	29	2.9	-1.4	-2.5	148	1.9	-1.0	1.6	193	4.9	1.1	4.8	200	5.9	2.0	5.5
24	76	3.0	-2.9	-0.7	73	2.8	-2.7	-0.8	67	3.0	-2.8	-1.2	57	6.1	-5.1	-3.3	141	1.3	-0.8	1.0	184	10.3	0.8	10.3	98	8.4	-8.3	1.1
25	56	1.4	-1.2	-0.8	74	2.5	-2.4	-0.7	63	0.9	-0.8	-0.4	79	7.1	-7.0	-1.4	162	1.6	-0.5	1.5	167	3.7	-0.8	3.6	128	7.9	-6.2	4.9
26	12	3.3	-0.7	-3.2	39	2.1	-1.3	-1.6	72	1.3	-1.2	-0.4	82	5.9	-5.8	-0.8	167	1.8	-0.4	1.8	165	8.0	-2.1	7.7	107	5.4	-5.2	1.6
27	13	3.9	-0.9	-3.8	77	3.1	-3.0	-0.7	93	2.0	-2.0	0.1	87	5.8	-5.8	-0.3	94	1.4	-1.4	0.1	181	6.1	0.1	6.1	108	6.6	-6.3	2.1
28	30	2.4	-1.2	-2.1	76	3.0	-2.9	-0.7	90	2.6	-2.6	0.0	79	7.0	-6.9	-1.3	106	1.8	-1.7	0.5	162	7.4	-2.3	7.0	90	5.4	-5.4	0.0
29	17	3.4	-1.0	-3.3	72	2.6	-2.5	-0.8	86	2.9	-2.9	-0.2	77	5.3	-5.2	-1.2	225	3.1	2.2	2.2	165	10.2	-2.7	9.8	71	7.5	-7.1	-2.4
30	23	2.6	-1.0	-2.4	66	3.9	-3.6	-1.6	83	3.9	-3.9	-0.5	84	5.9	-5.9	-0.6	131	3.5	-2.6	2.3	171	9.2	-1.5	9.1	—	—	—	—

Daily Normals of Upper Air Winds (1971-2000)

AMINI

DECEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	49	2.3	-1.7	-1.5	74	2.9	-2.8	-0.8	94	4.8	-4.8	0.3	94	6.0	-6.0	0.4	157	2.3	-0.9	2.1	193	7.2	1.6	7.0	328	2.5	1.3	-2.1			
2	61	2.9	-2.5	-1.4	79	3.1	-3.0	-0.6	93	3.7	-3.7	0.2	85	5.4	-5.4	-0.5	139	3.7	-2.4	2.8	202	7.9	3.0	7.3	108	2.0	-1.9	0.6			
3	41	3.2	-2.1	-2.4	103	2.2	-2.1	0.5	83	4.2	-4.2	-0.5	81	5.8	-5.7	-0.9	150	4.2	-2.1	3.6	190	9.5	1.6	9.4	16	2.6	-0.7	-2.5			
4	52	3.9	-3.1	-2.4	60	2.8	-2.4	-1.4	76	5.4	-5.2	-1.3	80	5.7	-5.6	-1.0	137	3.5	-2.4	2.6	194	5.7	1.4	5.5	360	0.4	0.0	-0.4			
5	27	2.0	-0.9	-1.8	80	2.7	-2.7	-0.5	81	3.6	-3.6	-0.6	83	4.9	-4.9	-0.6	117	1.1	-1.0	0.5	210	6.6	3.3	5.7	103	4.0	-3.9	0.9			
6	49	3.0	-2.3	-2.0	59	2.6	-2.2	-1.3	82	4.8	-4.7	-0.7	74	4.5	-4.3	-1.2	135	2.7	-1.9	1.9	164	5.5	-1.5	5.3	52	1.8	-1.4	-1.1			
7	32	1.3	-0.7	-1.1	53	2.6	-2.1	-1.6	71	4.0	-3.8	-1.3	58	2.8	-2.4	-1.5	183	2.2	0.1	2.2	195	8.3	2.2	8.0	51	2.2	-1.7	-1.4			
8	45	3.3	-2.3	-2.3	57	2.4	-2.0	-1.3	80	3.9	-3.8	-0.7	69	3.1	-2.9	-1.1	221	5.2	3.4	3.9	219	13.1	8.2	10.2	19	5.2	-1.7	-4.9			
9	31	2.7	-1.4	-2.3	58	1.3	-1.1	-0.7	69	1.9	-1.8	-0.7	78	2.5	-2.4	-0.5	261	3.9	3.9	0.6	196	8.3	2.3	8.0	135	3.7	-2.6	2.6			
10	19	4.2	-1.4	-4.0	82	2.7	-2.7	-0.4	80	2.3	-2.3	-0.4	35	1.2	-0.7	-1.0	217	1.0	0.6	0.8	209	6.0	2.9	5.2	41	2.0	-1.3	-1.5			
11	8	3.7	-0.5	-3.7	78	1.9	-1.9	-0.4	81	2.6	-2.6	-0.4	86	2.9	-2.9	-0.2	216	4.7	2.8	3.8	237	7.5	6.3	4.1	194	0.4	0.1	0.4			
12	61	3.3	-2.9	-1.6	95	2.3	-2.3	0.2	88	2.7	-2.7	-0.1	98	3.0	-3.0	0.4	212	7.5	4.0	6.4	213	9.8	5.4	8.2	187	10.4	1.2	10.3			
13	58	2.8	-2.4	-1.5	68	2.2	-2.0	-0.8	90	2.0	-2.0	0.0	77	3.2	-3.1	-0.7	242	6.7	5.9	3.1	217	10.4	6.2	8.3	233	7.0	5.6	4.2			
14	72	3.3	-3.1	-1.0	86	2.6	-2.6	-0.2	79	3.3	-3.2	-0.6	76	3.3	-3.2	-0.8	248	5.5	5.1	2.1	223	8.9	6.1	6.5	81	4.0	-4.0	-0.6			
15	102	1.4	-1.4	0.3	90	1.8	-1.8	0.0	90	2.1	-2.1	0.0	78	4.8	-4.7	-1.0	256	3.7	3.6	0.9	236	7.6	6.3	4.3	204	19.0	7.7	17.4			
16	124	1.1	-0.9	0.6	79	2.0	-2.0	-0.4	81	2.4	-2.4	-0.4	82	1.4	-1.4	-0.2	247	4.0	3.7	1.6	238	9.4	8.0	5.0	277	1.7	1.7	-0.2			
17	122	3.1	-2.6	1.6	95	2.5	-2.5	0.2	75	2.7	-2.6	-0.7	93	3.4	-3.4	0.2	232	8.2	6.5	5.0	212	7.8	4.2	6.6	229	2.0	1.5	1.3			
18	63	2.9	-2.6	-1.3	92	2.7	-2.7	0.1	79	3.8	-3.7	-0.7	32	3.9	-2.1	-3.3	278	6.9	6.8	-1.0	222	8.3	5.5	6.2	360	0.7	0.0	-0.7			
19	88	2.5	-2.5	-0.1	86	2.7	-2.7	-0.2	77	2.7	-2.6	-0.6	66	4.5	-4.1	-1.8	260	3.4	3.3	0.6	238	7.3	6.2	3.9	111	4.0	-3.7	1.4			
20	37	4.0	-2.4	-3.2	66	3.0	-2.7	-1.2	88	2.9	-2.9	-0.1	83	4.6	-4.6	-0.6	293	3.9	3.6	-1.5	266	9.5	9.5	0.7	55	6.5	-5.3	-3.7			
21	40	3.9	-2.5	-3.0	53	2.5	-2.0	-1.5	71	1.8	-1.7	-0.6	91	4.1	-4.1	0.1	239	3.3	2.8	1.7	230	8.5	6.5	5.5	135	1.7	-1.2	1.2			
22	37	3.0	-1.8	-2.4	62	1.7	-1.5	-0.8	88	3.3	-3.3	-0.1	59	3.3	-2.8	-1.7	223	5.2	3.5	3.8	229	7.7	5.8	5.0	71	16.0	-15.1	-5.2			
23	53	4.0	-3.2	-2.4	72	2.8	-2.7	-0.9	68	3.5	-3.2	-1.3	94	4.7	-4.7	0.3	240	6.7	5.8	3.3	231	8.5	6.6	5.4	—	—	—	—			
24	69	2.6	-2.4	-0.9	74	2.2	-2.1	-0.6	90	3.1	-3.1	0.0	52	3.3	-2.6	-2.0	255	7.3	7.0	1.9	259	11.8	11.6	2.3	338	5.2	1.9	-4.8			
25	42	1.3	-0.9	-1.0	98	2.2	-2.2	0.3	95	3.2	-3.2	0.3	72	4.4	-4.2	-1.4	258	4.5	4.4	0.9	279	7.6	7.5	-1.2	281	7.0	6.9	-1.3			
26	26	2.5	-1.1	-2.3	90	1.2	-1.2	0.0	104	1.6	-1.6	0.4	169	1.5	-0.3	1.5	212	6.5	3.5	5.5	222	11.3	7.6	8.4	—	—	—	—			
27	51	2.7	-2.1	-1.7	83	2.4	-2.4	-0.3	84	3.8	-3.8	-0.4	147	2.0	-1.1	1.7	211	4.7	2.4	4.0	235	14.0	11.5	8.0	281	11.0	10.8	-2.1			
28	34	3.2	-1.8	-2.7	66	3.2	-2.9	-1.3	66	4.4	-4.0	-1.8	120	1.4	-1.2	0.7	229	8.6	6.5	5.7	245	11.9	10.8	5.0	131	7.0	-5.3	4.6			
29	30	2.2	-1.1	-1.9	98	2.2	-2.2	0.3	109	2.4	-2.3	0.8	68	4.5	-4.2	-1.7	227	5.7	4.2	3.9	255	12.8	12.4	3.3	284	6.2	6.0	-1.5			
30	44	2.9	-2.0	-2.1	49	2.3	-1.7	-1.5	83	4.0	-4.0	-0.5	40	2.3	-1.5	-1.8	244	8.1	7.3	3.5	250	18.4	17.3	6.2	252	6.0	5.7	1.8			
31	47	3.4	-2.5	-2.3	63	1.1	-1.0	-0.5	73	3.7	-3.5	-1.1	86	2.8	-2.8	-0.2	248	6.6	6.1	2.5	235	11.6	9.6	6.6	23	2.8	-1.1	-2.6			

Daily Normals of Upper Air Winds (1971-2000)

AURANGABAD

JANUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	70	1.5	-1.4	-0.5	45	0.4	-0.3	-0.3	268	4.6	4.6	0.2	266	12.5	12.5	0.8	272	23.3	23.3	-0.9	257	34.4	33.5	7.7	223	31.4	21.2	23.1
2	231	1.3	1.0	0.8	180	0.6	0.0	0.6	267	5.6	5.6	0.3	268	16.8	16.8	0.6	265	33.5	33.4	2.8	254	33.2	32.0	9.0	232	14.1	11.2	8.6
3	353	0.8	0.1	-0.8	353	0.8	0.1	-0.8	295	2.1	1.9	-0.9	276	11.0	10.9	-1.1	269	31.1	31.1	0.8	261	36.2	35.7	5.7	282	27.6	27.0	-5.6
4	73	1.0	-1.0	-0.3	135	0.6	-0.4	0.4	278	4.1	4.1	-0.6	257	14.7	14.3	3.2	255	32.5	31.3	8.6	289	32.5	30.7	-10.8	209	13.7	6.7	11.9
5	63	0.4	-0.4	-0.2	235	1.6	1.3	0.9	284	5.7	5.5	-1.4	270	14.2	14.2	0.0	251	35.8	33.8	11.8	251	52.2	49.4	16.9	249	44.0	41.1	15.8
6	189	0.6	0.1	0.6	212	0.9	0.5	0.8	258	4.8	4.7	1.0	275	16.8	16.7	-1.6	263	34.4	34.1	4.2	242	42.3	37.5	19.6	260	28.0	27.5	5.0
7	122	0.9	-0.8	0.5	235	1.2	1.0	0.7	242	5.2	4.6	2.4	265	16.7	16.6	1.5	267	31.2	31.2	1.4	262	35.7	35.4	4.7	273	14.6	14.6	-0.7
8	219	0.6	0.4	0.5	228	1.5	1.1	1.0	264	8.0	8.0	0.8	259	18.1	17.7	3.6	272	32.4	32.4	-1.2	266	48.7	48.6	3.3	—	—	—	—
9	252	2.5	2.4	0.8	210	1.4	0.7	1.2	261	5.9	5.8	0.9	267	16.0	16.0	0.8	265	31.2	31.1	2.7	267	34.6	34.6	1.6	274	17.6	17.6	-1.1
10	143	0.5	-0.3	0.4	177	1.8	-0.1	1.8	239	6.8	5.8	3.5	256	18.1	17.6	4.3	258	33.4	32.6	7.2	267	35.1	35.1	1.6	—	—	—	—
11	307	0.5	0.4	-0.3	249	1.4	1.3	0.5	245	7.7	7.0	3.2	261	19.9	19.6	3.2	264	32.0	31.8	3.3	250	34.5	32.5	11.7	317	10.2	6.9	-7.5
12	262	1.4	1.4	0.2	225	1.3	0.9	0.9	255	8.9	8.6	2.3	273	18.7	18.7	-0.9	267	34.0	34.0	1.5	299	30.4	26.5	-14.9	229	5.0	3.8	3.3
13	300	2.4	2.1	-1.2	222	1.5	1.0	1.1	271	4.8	4.8	-0.1	268	17.4	17.4	0.6	266	37.6	37.5	2.3	266	39.8	39.7	3.0	243	7.2	6.4	3.3
14	252	2.8	2.7	0.9	225	3.4	2.4	2.4	259	6.5	6.4	1.3	265	19.0	18.9	1.6	263	38.3	38.0	5.0	258	48.3	47.2	10.1	—	—	—	—
15	268	3.7	3.7	0.1	251	3.6	3.4	1.2	251	9.1	8.6	2.9	264	20.5	20.4	2.2	261	38.0	37.5	6.0	246	30.8	28.2	12.5	—	—	—	—
16	37	1.5	-0.9	-1.2	234	0.9	0.7	0.5	259	7.1	7.0	1.3	258	15.8	15.5	3.3	255	36.8	35.6	9.3	266	35.4	35.3	2.6	261	20.0	19.8	3.1
17	360	0.5	0.0	-0.5	239	1.2	1.0	0.6	263	5.7	5.7	0.7	275	15.1	15.0	-1.4	259	30.7	30.2	5.6	272	32.4	32.4	-1.0	262	26.9	26.6	3.9
18	266	1.6	1.6	0.1	236	2.3	1.9	1.3	267	6.5	6.5	0.3	266	15.5	15.5	1.1	256	34.6	33.5	8.6	261	28.1	27.8	4.2	227	5.0	3.7	3.4
19	298	3.2	2.8	-1.5	245	1.9	1.7	0.8	275	5.9	5.9	-0.5	268	17.4	17.4	0.5	263	32.1	31.9	3.9	248	36.0	33.5	13.3	218	18.0	11.1	14.2
20	295	3.8	3.5	-1.6	272	2.8	2.8	-0.1	283	6.5	6.3	-1.5	272	21.5	21.5	-0.8	254	35.2	33.8	9.7	255	31.5	30.4	8.2	228	36.2	26.9	24.2
21	276	2.9	2.9	-0.3	260	2.9	2.9	0.5	267	6.6	6.6	0.4	275	16.3	16.2	-1.4	253	29.5	28.3	8.4	246	30.0	27.5	12.0	261	11.5	11.4	1.8
22	280	2.9	2.9	-0.5	275	1.2	1.2	-0.1	271	5.3	5.3	-0.1	260	17.8	17.5	3.2	254	38.3	36.9	10.3	251	34.1	32.2	11.2	264	21.0	20.9	2.2
23	315	1.7	1.2	-1.2	259	1.6	1.6	0.3	285	6.2	6.0	-1.6	272	18.3	18.3	-0.6	262	34.1	33.7	5.0	243	28.5	25.3	13.1	229	6.0	4.5	3.9
24	232	1.6	1.3	1.0	241	2.1	1.8	1.0	268	5.4	5.4	0.2	272	16.2	16.2	-0.5	266	26.5	26.4	1.7	255	29.6	28.6	7.6	282	18.5	18.1	-4.0
25	257	1.8	1.8	0.4	216	1.9	1.1	1.5	261	4.5	4.4	0.7	270	14.2	14.2	-0.1	272	27.0	27.0	-0.9	261	28.5	28.1	4.6	233	32.5	25.8	19.7
26	300	2.2	1.9	-1.1	237	1.7	1.4	0.9	274	3.2	3.2	-0.2	264	16.9	16.8	1.8	267	30.8	30.8	1.5	253	34.4	32.8	10.3	297	6.4	5.7	-2.9
27	294	3.4	3.1	-1.4	255	2.0	1.9	0.5	293	2.5	2.3	-1.0	263	15.3	15.2	1.9	263	25.8	25.6	3.3	245	26.6	24.0	11.4	251	19.1	18.1	6.2
28	283	2.3	2.2	-0.5	277	1.7	1.7	-0.2	286	4.7	4.5	-1.3	279	17.6	17.4	-2.9	265	28.0	27.9	2.2	248	35.6	33.1	13.2	272	28.0	28.0	-1.0
29	308	3.3	2.6	-2.0	298	2.1	1.9	-1.0	277	5.8	5.8	-0.7	276	18.7	18.6	-2.0	279	30.6	30.2	-4.7	266	39.8	39.7	2.7	149	10.8	-5.6	9.2
30	286	4.5	4.3	-1.2	264	3.6	3.6	0.4	278	6.9	6.8	-1.0	278	14.5	14.4	-1.9	269	29.0	29.0	0.6	252	32.6	31.0	10.1	286	83.0	79.8	-22.9
31	275	2.5	2.5	-0.2	258	3.5	3.4	0.7	276	8.0	7.9	-0.9	271	19.1	19.1	-0.4	262	33.7	33.4	4.7	261	41.3	40.8	6.5	268	38.9	38.9	1.5

Daily Normals of Upper Air Winds (1971-2000)

38

AURANGABAD

FEBRUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	275	2.2	2.2	-0.2	257	4.3	4.2	1.0	271	8.8	8.8	-0.1	274	17.9	17.9	-1.1	268	32.0	32.0	1.2	258	36.4	35.6	7.7	253	39.5	37.8	11.3			
2	262	3.7	3.7	0.5	260	2.2	2.2	0.4	283	7.2	7.0	-1.6	281	16.4	16.1	-3.2	269	32.7	32.7	0.6	259	37.9	37.2	7.1	306	15.2	12.3	-8.9			
3	270	2.4	2.4	0.0	292	2.4	2.2	-0.9	284	5.4	5.2	-1.3	269	17.7	17.7	0.2	283	24.0	23.4	-5.4	289	31.1	29.4	-10.0	283	28.2	27.4	-6.5			
4	266	4.0	4.0	0.3	270	3.4	3.4	0.0	262	7.2	7.1	1.0	261	24.0	23.7	3.7	273	30.9	30.9	-1.6	264	26.1	26.0	2.7	262	31.5	31.2	4.3			
5	297	3.0	2.7	-1.4	267	3.5	3.5	0.2	270	7.0	7.0	0.0	276	18.6	18.5	-1.9	261	28.6	28.2	4.6	269	43.0	43.0	1.1	317	9.0	6.1	-6.6			
6	295	1.4	1.3	-0.6	240	0.8	0.7	0.4	274	4.0	4.0	-0.3	269	14.0	14.0	0.2	277	27.3	27.1	-3.3	273	30.7	30.7	-1.6	339	28.0	10.0	-26.2			
7	268	2.8	2.8	0.1	254	2.5	2.4	0.7	258	3.9	3.8	0.8	272	13.6	13.6	-0.4	267	38.8	38.7	2.3	266	42.9	42.8	2.8	268	18.1	18.1	0.5			
8	313	2.3	1.7	-1.6	274	3.0	3.0	-0.2	269	6.3	6.3	0.1	266	17.8	17.8	1.1	273	34.0	34.0	-1.8	261	26.2	25.9	4.0	36	23.0	-13.5	-18.6			
9	310	2.5	1.9	-1.6	282	2.4	2.3	-0.5	274	5.3	5.3	-0.4	282	16.2	15.8	-3.4	279	28.6	28.2	-4.5	277	38.2	37.9	-4.4	285	25.0	24.1	-6.5			
10	294	3.0	2.7	-1.2	274	1.3	1.3	-0.1	269	4.5	4.5	0.1	287	15.7	15.0	-4.5	275	31.8	31.7	-2.8	263	38.0	37.7	4.5	268	39.5	39.5	1.1			
11	294	2.0	1.8	-0.8	246	2.2	2.0	0.9	261	3.8	3.8	0.6	274	16.1	16.1	-1.2	289	28.9	27.3	-9.5	301	27.9	24.0	-14.3	248	13.1	12.1	4.9			
12	279	2.4	2.4	-0.4	270	2.4	2.4	0.0	253	3.9	3.7	1.1	287	12.4	11.8	-3.7	283	21.9	21.3	-4.9	273	28.2	28.2	-1.3	309	43.2	33.7	-27.1			
13	282	2.5	2.4	-0.5	245	2.3	2.1	1.0	243	6.3	5.6	2.8	261	14.6	14.4	2.2	270	34.7	34.7	0.3	261	32.5	32.1	5.3	274	46.0	45.9	-3.2			
14	284	3.0	2.9	-0.7	269	3.9	3.9	0.1	246	8.6	7.9	3.5	263	21.5	21.3	2.7	268	28.3	28.3	0.8	264	31.4	31.2	3.4	270	15.4	15.4	0.0			
15	276	4.0	4.0	-0.4	275	3.8	3.8	-0.3	260	8.0	7.9	1.4	269	20.8	20.8	0.3	265	44.3	44.1	3.9	267	31.8	31.8	1.5	227	11.5	8.5	7.8			
16	268	4.6	4.6	0.2	274	4.4	4.4	-0.3	263	8.7	8.6	1.1	262	21.8	21.6	2.9	256	39.8	38.7	9.5	257	34.7	33.8	8.0	—	—	—	—			
17	282	4.5	4.4	-0.9	264	4.0	4.0	0.4	265	8.6	8.6	0.7	267	21.4	21.4	1.0	264	35.1	34.9	3.8	261	35.2	34.8	5.6	244	52.0	46.7	22.8			
18	270	3.5	3.5	0.0	272	3.5	3.5	-0.1	260	9.6	9.5	1.6	280	22.8	22.5	-3.9	271	40.5	40.5	-0.6	260	36.9	36.3	6.6	—	—	—	—			
19	274	5.4	5.4	-0.4	274	2.9	2.9	-0.2	272	6.4	6.4	-0.2	272	22.1	22.1	-0.9	270	36.0	36.0	0.2	280	41.2	40.6	-7.0	—	—	—	—			
20	287	5.0	4.8	-1.5	270	3.5	3.5	0.0	272	7.4	7.4	-0.2	277	20.9	20.7	-2.7	272	40.3	40.3	-1.5	255	45.9	44.3	12.1	271	8.2	8.2	-0.2			
21	275	3.3	3.3	-0.3	268	3.4	3.4	0.1	274	7.8	7.8	-0.6	281	20.6	20.2	-3.9	280	36.5	35.9	-6.6	259	36.3	35.7	6.7	304	10.0	8.3	-5.6			
22	307	3.4	2.7	-2.0	298	2.1	1.9	-1.0	287	5.9	5.7	-1.7	279	17.0	16.8	-2.6	276	36.7	36.5	-3.6	260	28.0	27.6	5.0	260	13.2	13.0	2.4			
23	302	1.3	1.1	-0.7	250	1.5	1.4	0.5	249	4.0	3.7	1.4	275	17.6	17.5	-1.4	270	33.5	33.5	-0.2	264	48.9	48.6	5.1	—	—	—	—			
24	280	2.3	2.3	-0.4	267	1.9	1.9	0.1	250	4.4	4.1	1.5	258	14.4	14.1	3.0	259	31.4	30.8	6.2	251	42.9	40.5	14.1	243	13.3	11.9	6.0			
25	273	4.4	4.4	-0.2	262	4.8	4.7	0.7	250	5.6	5.3	1.9	277	16.9	16.8	-2.2	274	33.5	33.4	-2.4	257	34.6	33.7	7.9	165	14.8	-3.8	14.3			
26	279	3.7	3.7	-0.6	265	4.2	4.2	0.4	269	5.5	5.5	0.1	269	19.0	19.0	0.2	267	36.3	36.2	2.0	257	42.2	41.1	9.7	239	49.9	42.8	25.7			
27	299	3.7	3.2	-1.8	261	4.5	4.4	0.7	264	6.1	6.1	0.6	279	16.6	16.4	-2.5	262	34.6	34.3	4.9	281	32.9	32.3	-6.5	181	7.4	0.1	7.4			
28	306	2.7	2.2	-1.6	263	4.3	4.3	0.5	256	6.4	6.2	1.6	265	16.1	16.0	1.3	267	38.7	38.7	1.9	270	35.0	35.0	0.2	—	—	—	—			
29	180	2.0	0.0	2.0	255	3.8	3.7	1.0	216	5.7	3.3	4.6	268	20.7	20.7	0.6	241	39.1	34.1	19.2	228	47.7	35.4	31.9	348	3.0	0.6	-2.9			

Daily Normals of Upper Air Winds (1971-2000)

AURANGABAD

MARCH

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	338	0.5	0.2	-0.5	286	2.2	2.1	-0.6	245	4.7	4.2	2.0	269	18.1	18.1	0.2	272	36.5	36.5	-1.5	255	44.6	43.0	11.7	252	50.8	48.4	15.3			
2	42	1.2	-0.8	-0.9	259	1.6	1.6	0.3	268	5.2	5.2	0.2	275	13.8	13.7	-1.2	270	33.4	33.4	-0.1	257	40.0	38.9	9.1	247	16.0	14.7	6.3			
3	295	2.6	2.4	-1.1	264	2.8	2.8	0.3	275	3.4	3.4	-0.3	276	13.4	13.3	-1.3	280	28.2	27.7	-5.1	269	46.2	46.2	0.6	264	34.6	34.4	3.5			
4	254	1.9	1.8	0.5	247	2.3	2.1	0.9	245	5.7	5.2	2.4	271	16.9	16.9	-0.4	262	28.8	28.5	3.9	259	35.0	34.4	6.7	306	7.9	6.4	-4.7			
5	278	3.6	3.6	-0.5	264	4.8	4.8	0.5	259	7.0	6.9	1.4	271	19.3	19.3	-0.3	266	30.5	30.4	2.3	257	40.1	39.1	9.0	249	29.4	27.5	10.3			
6	292	3.5	3.2	-1.3	271	4.8	4.8	-0.1	252	6.0	5.7	1.8	271	14.5	14.5	-0.3	260	28.6	28.2	4.9	255	30.2	29.2	7.8	271	27.7	27.7	-0.4			
7	306	1.7	1.4	-1.0	262	2.1	2.1	0.3	249	4.3	4.0	1.5	264	15.9	15.8	1.8	271	31.0	31.0	-0.7	264	39.3	39.1	4.1	270	42.3	42.3	0.2			
8	290	4.7	4.4	-1.6	273	3.7	3.7	-0.2	273	4.0	4.0	-0.2	270	13.5	13.5	0.0	265	33.5	33.4	3.0	259	42.7	41.9	8.0	262	32.5	32.2	4.6			
9	284	4.6	4.5	-1.1	291	2.5	2.3	-0.9	261	4.4	4.3	0.7	269	13.1	13.1	0.2	265	27.6	27.5	2.6	267	29.6	29.6	1.4	274	9.7	9.7	-0.6			
10	265	2.4	2.4	0.2	244	3.7	3.3	1.6	254	4.0	3.8	1.1	268	13.9	13.9	0.5	276	27.3	27.2	-2.7	278	34.9	34.6	-4.7	296	15.1	13.5	-6.7			
11	261	5.4	5.3	0.8	262	4.1	4.1	0.6	263	6.0	6.0	0.7	275	15.3	15.2	-1.3	274	30.1	30.0	-1.9	264	32.8	32.6	3.7	239	22.8	19.5	11.8			
12	282	3.9	3.8	-0.8	278	5.5	5.4	-0.8	261	6.1	6.0	0.9	276	12.7	12.6	-1.4	268	30.9	30.9	1.1	254	32.0	30.8	8.6	255	22.1	21.3	5.8			
13	290	4.1	3.9	-1.4	280	4.7	4.6	-0.8	256	5.0	4.9	1.2	276	15.8	15.7	-1.7	272	31.3	31.3	-1.0	270	35.4	35.4	0.0	281	11.5	11.3	-2.1			
14	293	3.8	3.5	-1.5	277	3.5	3.5	-0.4	252	4.6	4.4	1.4	287	11.4	10.9	-3.3	285	26.6	25.7	-7.0	288	33.3	31.7	-10.1	318	24.3	16.4	-17.9			
15	248	3.1	2.9	1.2	248	4.6	4.3	1.7	241	5.1	4.5	2.5	273	15.3	15.3	-0.7	275	25.4	25.3	-2.1	271	26.6	26.6	-0.5	280	15.7	15.4	-2.8			
16	277	4.2	4.2	-0.5	267	3.5	3.5	0.2	258	4.9	4.8	1.0	270	10.5	10.5	0.0	270	25.4	25.4	-0.2	277	24.0	23.8	-2.8	273	13.6	13.6	-0.6			
17	278	3.5	3.5	-0.5	271	4.1	4.1	-0.1	251	4.6	4.4	1.5	262	15.1	14.9	2.2	273	27.3	27.3	-1.4	277	28.7	28.5	-3.6	238	15.0	12.7	7.9			
18	320	4.3	2.8	-3.3	278	3.6	3.6	-0.5	255	5.2	5.0	1.3	279	14.7	14.5	-2.3	260	31.0	30.5	5.5	261	32.3	31.9	4.8	160	3.0	-1.0	2.8			
19	282	2.4	2.3	-0.5	274	3.9	3.9	-0.3	252	5.2	5.0	1.6	277	14.9	14.8	-1.9	269	26.2	26.2	0.3	273	32.9	32.9	-1.5	—	—	—	—			
20	297	4.2	3.8	-1.9	287	3.8	3.6	-1.1	257	5.2	5.1	1.2	273	15.7	15.7	-0.7	273	26.5	26.5	-1.2	269	32.2	32.2	0.6	279	12.9	12.7	-2.1			
21	274	4.5	4.5	-0.3	277	4.6	4.6	-0.6	266	6.5	6.5	0.4	269	12.5	12.5	0.3	295	19.8	18.0	-8.3	281	31.5	30.9	-6.1	243	23.5	21.0	10.6			
22	300	5.0	4.3	-2.5	285	5.7	5.5	-1.5	260	7.2	7.1	1.2	274	13.8	13.8	-0.9	272	27.8	27.8	-1.0	270	30.1	30.1	0.1	—	—	—	—			
23	285	3.9	3.8	-1.0	283	4.3	4.2	-1.0	261	5.7	5.6	0.9	276	12.1	12.0	-1.2	261	23.0	22.7	3.5	257	27.7	27.0	6.3	305	7.0	5.7	-4.0			
24	309	3.2	2.5	-2.0	302	2.8	2.4	-1.5	253	6.2	5.9	1.8	268	12.1	12.1	0.5	257	24.4	23.8	5.5	263	32.7	32.4	4.2	147	10.9	-6.0	9.1			
25	290	4.9	4.6	-1.7	268	3.2	3.2	0.1	271	5.5	5.5	-0.1	282	15.1	14.8	-3.2	275	30.2	30.1	-2.5	253	32.6	31.2	9.6	245	10.0	9.1	4.2			
26	305	3.5	2.9	-2.0	275	3.4	3.4	-0.3	264	5.6	5.6	0.6	276	15.4	15.3	-1.7	279	25.6	25.3	-4.2	271	38.2	38.2	-0.4	244	54.0	48.5	23.7			
27	319	2.3	1.5	-1.7	286	3.2	3.1	-0.9	305	2.8	2.3	-1.6	281	11.0	10.8	-2.1	272	24.3	24.3	-1.0	271	34.6	34.6	-0.4	—	—	—	—			
28	303	2.7	2.3	-1.5	292	4.3	4.0	-1.6	295	3.3	3.0	-1.4	283	9.7	9.4	-2.2	280	23.6	23.2	-4.2	246	29.1	26.6	11.7	255	19.3	18.6	5.0			
29	317	3.7	2.5	-2.7	290	4.4	4.1	-1.5	261	4.6	4.5	0.7	274	10.5	10.5	-0.8	275	24.5	24.4	-2.1	266	31.9	31.8	2.5	295	8.1	7.3	-3.4			
30	279	3.8	3.8	-0.6	267	4.0	4.0	0.2	265	3.7	3.7	0.3	272	10.1	10.1	-0.4	267	24.3	24.3	1.2	263	30.2	30.0	3.8	279	18.1	17.9	-2.8			
31	299	3.7	3.2	-1.8	281	4.1	4.0	-0.8	271	4.1	4.1	-0.1	269	13.1	13.1	0.3	269	24.6	24.6	0.5	260	34.5	34.0	6.0	241	33.0	28.9	16.0			

Daily Normals of Upper Air Winds (1971-2000)

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AURANGABAD

APRIL

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	300	4.0	3.5	-2.0	279	3.6	3.6	-0.6	273	4.1	4.1	-0.2	262	11.1	11.0	1.6	270	24.2	24.2	0.0	275	34.9	34.8	-2.9	262	4.9	4.8	0.7			
2	278	4.2	4.2	-0.6	276	3.8	3.8	-0.4	270	5.1	5.1	0.0	262	11.0	10.9	1.5	266	21.8	21.8	1.4	263	27.1	26.9	3.1	267	22.4	22.4	1.0			
3	306	3.4	2.8	-2.0	297	3.7	3.3	-1.7	258	3.8	3.7	0.8	271	10.6	10.6	-0.1	263	26.0	25.8	3.3	251	25.6	24.2	8.2	274	12.1	12.1	-0.8			
4	288	4.2	4.0	-1.3	293	4.1	3.8	-1.6	303	3.5	2.9	-1.9	274	9.1	9.1	-0.7	271	25.5	25.5	-0.5	274	33.2	33.1	-2.5	257	16.5	16.1	3.7			
5	292	3.5	3.3	-1.3	281	2.5	2.5	-0.5	276	3.7	3.7	-0.4	282	6.9	6.8	-1.4	277	20.1	20.0	-2.4	270	31.5	31.5	0.0	247	10.2	9.4	4.0			
6	312	3.6	2.7	-2.4	286	1.9	1.8	-0.5	279	2.0	2.0	-0.3	279	5.7	5.6	-0.9	280	23.5	23.2	-3.9	259	24.6	24.1	4.8	233	3.5	2.8	2.1			
7	300	3.0	2.6	-1.5	282	2.4	2.3	-0.5	313	2.5	1.8	-1.7	282	7.5	7.3	-1.5	269	16.9	16.9	0.4	270	29.4	29.4	0.0	259	21.1	20.7	4.2			
8	292	5.1	4.7	-1.9	278	3.7	3.7	-0.5	279	3.8	3.8	-0.6	285	8.4	8.1	-2.2	279	25.7	25.4	-4.0	271	27.5	27.5	-0.5	201	6.5	2.3	6.1			
9	281	6.2	6.1	-1.2	288	4.6	4.4	-1.4	280	4.8	4.7	-0.8	276	8.7	8.7	-0.9	264	23.7	23.6	2.5	255	28.7	27.7	7.4	55	9.0	-7.4	-5.2			
10	305	3.8	3.1	-2.2	292	4.0	3.7	-1.5	264	4.5	4.5	0.5	269	8.2	8.2	0.2	263	22.1	21.9	2.8	272	26.3	26.3	-0.9	249	28.6	26.8	10.1			
11	274	4.5	4.5	-0.3	277	5.2	5.2	-0.6	275	3.8	3.8	-0.3	279	8.2	8.1	-1.3	276	18.3	18.2	-2.0	275	26.2	26.1	-2.2	268	10.0	10.0	0.3			
12	302	3.4	2.9	-1.8	306	3.4	2.8	-2.0	278	2.8	2.8	-0.4	274	7.9	7.9	-0.6	257	21.8	21.2	4.9	254	24.7	23.7	6.8	233	11.0	8.8	6.6			
13	305	2.4	2.0	-1.4	292	3.1	2.9	-1.2	272	2.8	2.8	-0.1	265	6.9	6.9	0.6	258	25.3	24.7	5.3	260	28.3	27.9	4.9	260	18.5	18.2	3.3			
14	286	4.0	3.8	-1.1	292	3.5	3.3	-1.3	274	2.6	2.6	-0.2	253	10.3	9.9	3.0	251	27.1	25.7	8.7	247	31.2	28.8	12.1	357	16.8	0.8	-16.8			
15	293	5.2	4.8	-2.0	284	3.7	3.6	-0.9	265	3.2	3.2	0.3	260	7.2	7.1	1.2	257	23.3	22.7	5.1	252	34.2	32.5	10.8	262	18.2	18.0	2.5			
16	281	4.7	4.6	-0.9	285	5.3	5.1	-1.4	265	4.6	4.6	0.4	280	7.0	6.9	-1.2	264	19.2	19.1	1.9	264	30.9	30.7	3.4	259	10.1	9.9	2.0			
17	292	4.6	4.3	-1.7	291	4.5	4.2	-1.6	281	3.3	3.2	-0.6	297	5.6	5.0	-2.6	265	18.1	18.0	1.6	257	28.7	28.0	6.5	261	22.5	22.2	3.5			
18	287	4.2	4.0	-1.2	299	3.1	2.7	-1.5	304	2.7	2.2	-1.5	271	4.6	4.6	-0.1	249	17.2	16.1	6.1	250	24.3	22.8	8.3	86	25.0	-24.9	-1.7			
19	300	4.0	3.5	-2.0	300	3.9	3.4	-2.0	276	3.1	3.1	-0.3	269	6.3	6.3	0.1	260	16.4	16.2	2.8	249	34.4	32.2	12.2	17	5.7	-1.7	-5.4			
20	305	3.7	3.0	-2.1	301	4.1	3.5	-2.1	280	2.9	2.9	-0.5	257	4.9	4.8	1.1	258	17.7	17.3	3.6	255	24.1	23.3	6.3	257	7.0	6.8	1.6			
21	307	5.4	4.3	-3.2	299	5.0	4.4	-2.4	279	4.5	4.4	-0.7	266	5.4	5.4	0.4	258	21.4	20.9	4.6	265	41.0	40.9	3.3	256	20.0	19.4	5.0			
22	326	5.2	2.9	-4.3	325	3.9	2.2	-3.2	273	2.2	2.2	-0.1	256	6.5	6.3	1.6	258	22.5	22.0	4.5	257	27.8	27.1	6.4	208	6.6	3.1	5.8			
23	309	3.3	2.6	-2.1	303	4.5	3.8	-2.5	291	4.0	3.7	-1.4	266	6.7	6.7	0.5	255	24.2	23.4	6.2	255	31.1	30.1	7.9	255	6.6	6.4	1.7			
24	329	7.2	3.7	-6.2	305	4.7	3.8	-2.7	286	3.6	3.5	-1.0	278	6.6	6.5	-0.9	267	21.7	21.7	1.3	259	30.8	30.3	5.7	256	9.6	9.3	2.3			
25	286	4.6	4.4	-1.3	288	4.1	3.9	-1.3	259	2.0	2.0	0.4	291	6.5	6.1	-2.3	284	25.4	24.6	-6.3	261	22.2	21.9	3.5	252	8.5	8.1	2.6			
26	313	4.1	3.0	-2.8	303	3.8	3.2	-2.1	298	2.6	2.3	-1.2	310	5.0	3.8	-3.2	275	20.3	20.2	-1.9	264	26.8	26.7	2.6	250	19.3	18.1	6.7			
27	328	5.9	3.1	-5.0	312	4.0	3.0	-2.7	277	2.5	2.5	-0.3	304	5.3	4.4	-3.0	267	16.8	16.8	0.8	254	24.2	23.3	6.5	260	7.5	7.4	1.3			
28	333	4.0	1.8	-3.6	314	4.0	2.9	-2.8	310	3.3	2.5	-2.1	298	4.4	3.9	-2.1	269	15.9	15.9	0.2	255	25.9	25.0	6.6	224	10.9	7.5	7.9			
29	288	6.7	6.4	-2.1	312	5.4	4.0	-3.6	324	4.1	2.4	-3.3	315	4.1	2.9	-2.9	280	13.6	13.4	-2.3	270	19.1	19.1	0.1	318	2.7	1.8	-2.0			
30	341	4.3	1.4	-4.1	316	3.6	2.5	-2.6	292	3.7	3.4	-1.4	270	4.0	4.0	0.0	256	15.6	15.1	3.8	264	14.6	14.5	1.4	191	6.3	1.2	6.2			

Daily Normals of Upper Air Winds (1971-2000)

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AURANGABAD

MAY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	318	5.7	3.8	-4.2	296	5.5	5.0	-2.4	267	4.3	4.3	0.2	267	6.0	6.0	0.3	267	17.8	17.8	1.0	245	24.4	22.1	10.4	245	11.8	10.7	4.9			
2	300	4.0	3.5	-2.0	288	4.8	4.6	-1.5	300	3.4	3.0	-1.7	258	5.3	5.2	1.1	247	16.8	15.5	6.5	235	24.6	20.1	14.1	167	6.5	-1.5	6.3			
3	304	6.0	5.0	-3.4	302	5.2	4.4	-2.8	289	4.0	3.8	-1.3	256	4.2	4.1	1.0	257	17.9	17.4	4.0	244	19.6	17.7	8.5	236	10.7	8.8	6.0			
4	309	4.9	3.8	-3.1	296	6.0	5.4	-2.6	292	2.9	2.7	-1.1	280	4.7	4.6	-0.8	260	17.9	17.6	3.0	245	25.2	22.8	10.7	287	11.3	10.8	-3.4			
5	327	4.2	2.3	-3.5	321	4.0	2.5	-3.1	297	3.4	3.0	-1.5	277	5.1	5.1	-0.6	268	18.4	18.4	0.5	244	28.7	25.9	12.4	174	5.1	-0.5	5.1			
6	326	3.6	2.0	-3.0	305	3.2	2.6	-1.8	297	3.3	2.9	-1.5	252	2.3	2.2	0.7	251	14.5	13.7	4.6	254	19.9	19.1	5.5	281	2.1	2.1	-0.4			
7	317	3.4	2.3	-2.5	308	3.4	2.7	-2.1	312	3.1	2.3	-2.1	275	3.5	3.5	-0.3	243	14.5	12.9	6.6	245	13.7	12.4	5.8	220	5.2	3.3	4.0			
8	310	5.3	4.1	-3.4	312	5.2	3.9	-3.5	298	2.4	2.1	-1.1	272	2.9	2.9	-0.1	261	13.4	13.2	2.2	243	11.2	10.0	5.1	139	4.6	-3.0	3.5			
9	309	5.0	3.9	-3.2	303	5.4	4.5	-2.9	320	4.5	2.9	-3.5	278	3.5	3.5	-0.5	267	14.3	14.3	0.8	243	13.9	12.4	6.2	95	15.6	-15.5	1.4			
10	292	7.3	6.8	-2.7	294	6.8	6.2	-2.7	280	6.0	5.9	-1.0	263	8.7	8.6	1.1	265	20.2	20.1	1.9	257	17.9	17.4	4.0	119	7.2	-6.3	3.5			
11	315	3.3	2.3	-2.3	311	4.9	3.7	-3.2	318	6.2	4.1	-4.6	313	5.1	3.7	-3.5	275	13.0	13.0	-1.1	250	16.6	15.6	5.6	109	6.2	-5.9	2.0			
12	306	4.2	3.4	-2.5	316	5.7	3.9	-4.1	322	3.1	1.9	-2.4	328	3.2	1.7	-2.7	263	11.2	11.1	1.4	250	19.1	17.9	6.6	234	7.7	6.3	4.5			
13	272	3.2	3.2	-0.1	301	5.6	4.8	-2.9	328	4.9	2.6	-4.2	322	4.3	2.7	-3.4	251	11.0	10.4	3.6	254	6.8	6.5	1.9	127	3.4	-2.7	2.0			
14	303	4.9	4.1	-2.7	302	4.7	4.0	-2.5	317	3.4	2.3	-2.5	333	4.7	2.1	-4.2	273	8.3	8.3	-0.5	239	13.0	11.2	6.6	82	10.8	-10.7	-1.5			
15	299	4.5	3.9	-2.2	301	5.1	4.4	-2.6	326	3.2	1.8	-2.7	350	4.0	0.7	-3.9	308	8.3	6.6	-5.1	226	5.2	3.7	3.6	174	11.1	-1.2	11.0			
16	308	4.4	3.5	-2.7	314	6.2	4.4	-4.3	321	3.6	2.3	-2.8	304	1.8	1.5	-1.0	271	7.3	7.3	-0.1	242	9.8	8.6	4.6	116	8.8	-7.9	3.9			
17	284	7.8	7.6	-1.9	316	4.9	3.4	-3.5	298	4.7	4.2	-2.2	344	5.4	1.5	-5.2	285	9.3	9.0	-2.4	235	8.3	6.8	4.8	99	1.8	-1.8	0.3			
18	298	6.9	6.1	-3.3	305	8.0	6.6	-4.6	319	5.7	3.8	-4.3	321	5.6	3.5	-4.4	270	12.5	12.5	0.1	231	14.6	11.4	9.2	155	5.4	-2.3	4.9			
19	285	7.5	7.3	-1.9	297	6.8	6.0	-3.1	295	5.2	4.7	-2.2	302	5.2	4.4	-2.8	266	10.3	10.3	0.7	242	19.6	17.3	9.2	114	1.7	-1.6	0.7			
20	295	6.5	5.9	-2.7	300	5.3	4.6	-2.7	307	4.3	3.4	-2.6	332	5.4	2.5	-4.8	301	6.4	5.5	-3.3	247	9.8	9.0	3.9	107	13.0	-12.4	3.9			
21	308	5.4	4.3	-3.3	296	5.5	4.9	-2.4	318	4.7	3.2	-3.5	355	4.8	0.4	-4.8	330	5.9	2.9	-5.1	258	7.5	7.3	1.5	238	6.0	5.1	3.2			
22	307	5.3	4.2	-3.2	311	4.6	3.5	-3.0	319	4.8	3.1	-3.6	347	4.6	1.0	-4.5	270	7.7	7.7	0.0	221	9.8	6.5	7.4	108	8.1	-7.7	2.5			
23	329	5.1	2.6	-4.4	312	5.9	4.4	-3.9	327	4.2	2.3	-3.5	9	1.9	-0.3	-1.9	265	3.6	3.6	0.3	211	5.7	3.0	4.9	112	10.0	-9.3	3.7			
24	312	4.7	3.5	-3.2	314	6.3	4.5	-4.4	303	2.0	1.7	-1.1	30	4.0	-2.0	-3.5	277	5.6	5.6	-0.7	223	10.0	6.8	7.4	123	8.5	-7.2	4.6			
25	332	5.4	2.5	-4.8	323	6.2	3.7	-5.0	324	3.6	2.1	-2.9	7	4.3	-0.5	-4.3	310	2.3	1.8	-1.5	244	2.8	2.5	1.2	70	7.9	-7.4	-2.7			
26	321	6.0	3.8	-4.7	320	5.5	3.5	-4.2	355	3.2	0.3	-3.2	21	3.6	-1.3	-3.4	212	3.8	2.0	3.2	196	5.3	1.5	5.1	66	8.0	-7.3	-3.2			
27	297	7.4	6.6	-3.4	306	6.2	5.0	-3.6	326	3.0	1.7	-2.5	35	4.0	-2.3	-3.3	292	5.1	4.7	-1.9	212	5.2	2.8	4.4	144	9.7	-5.7	7.9			
28	280	7.5	7.4	-1.3	299	7.9	6.9	-3.9	308	4.3	3.4	-2.7	351	1.9	0.3	-1.9	255	3.8	3.7	1.0	227	6.6	4.8	4.5	119	13.0	-11.4	6.3			
29	300	6.9	6.0	-3.4	299	6.6	5.8	-3.2	295	2.6	2.4	-1.1	336	3.0	1.2	-2.7	274	6.5	6.5	-0.5	204	4.5	1.8	4.1	88	17.3	-17.3	-0.7			
30	296	7.1	6.4	-3.1	300	6.2	5.4	-3.1	298	4.4	3.9	-2.1	331	2.3	1.1	-2.0	274	4.7	4.7	-0.3	232	3.1	2.4	1.9	97	12.6	-12.5	1.6			
31	296	7.2	6.5	-3.2	311	5.0	3.8	-3.3	323	5.8	3.5	-4.6	308	1.6	1.3	-1.0	272	5.1	5.1	-0.2	232	9.0	7.1	5.6	140	9.7	-6.3	7.4			

Daily Normals of Upper Air Winds (1971-2000)

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AURANGABAD

JUNE

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	319	8.2	5.4	-6.2	323	5.6	3.4	-4.5	303	4.2	3.5	-2.3	330	1.4	0.7	-1.2	202	1.8	0.7	1.7	187	4.6	0.6	4.6	84	13.3	-13.2	-1.4			
2	309	5.0	3.9	-3.2	311	5.2	3.9	-3.4	333	3.9	1.8	-3.5	336	2.2	0.9	-2.0	280	1.7	1.7	-0.3	190	6.6	1.1	6.5	106	13.6	-13.1	3.7			
3	308	4.9	3.9	-3.0	318	5.8	3.9	-4.3	320	4.0	2.6	-3.1	317	2.3	1.6	-1.7	214	2.5	1.4	2.1	133	5.4	-4.0	3.7	114	15.3	-14.0	6.1			
4	318	5.1	3.4	-3.8	329	5.5	2.8	-4.7	322	3.6	2.2	-2.8	328	2.5	1.3	-2.1	220	3.0	1.9	2.3	123	8.2	-6.8	4.5	103	15.2	-14.8	3.3			
5	308	4.7	3.7	-2.9	308	2.8	2.2	-1.7	344	4.0	1.1	-3.8	15	2.0	-0.5	-1.9	227	4.0	2.9	2.7	196	5.1	1.4	4.9	82	16.0	-15.8	-2.3			
6	280	2.2	2.2	-0.4	291	3.1	2.9	-1.1	14	0.8	-0.2	-0.8	90	0.1	-0.1	0.0	172	2.2	-0.3	2.2	127	8.9	-7.1	5.4	101	16.6	-16.3	3.3			
7	267	3.7	3.7	0.2	223	6.0	4.1	4.4	33	2.0	-1.1	-1.7	270	0.4	0.4	0.0	119	3.1	-2.7	1.5	99	6.3	-6.2	1.0	92	18.1	-18.1	0.5			
8	292	5.0	4.6	-1.9	292	4.8	4.4	-1.8	14	0.4	-0.1	-0.4	146	0.7	-0.4	0.6	95	3.8	-3.8	0.3	87	8.4	-8.4	-0.5	84	17.0	-16.9	-1.7			
9	263	4.9	4.9	0.6	265	5.6	5.6	0.5	270	2.8	2.8	0.0	83	0.8	-0.8	-0.1	96	4.4	-4.4	0.5	79	11.7	-11.5	-2.2	74	19.0	-18.2	-5.3			
10	289	6.1	5.8	-2.0	275	7.3	7.3	-0.6	295	3.8	3.5	-1.6	246	3.4	3.1	1.4	97	5.6	-5.6	0.7	103	11.2	-10.9	2.5	59	26.4	-22.6	-13.7			
11	288	4.6	4.4	-1.4	282	5.6	5.5	-1.2	270	1.7	1.7	0.0	252	2.6	2.5	0.8	61	3.1	-2.7	-1.5	102	8.5	-8.3	1.7	65	22.6	-20.5	-9.4			
12	275	6.3	6.3	-0.6	285	5.9	5.7	-1.5	319	3.2	2.1	-2.4	233	1.5	1.2	0.9	77	3.5	-3.4	-0.8	96	10.5	-10.4	1.1	87	23.6	-23.6	-1.4			
13	285	7.1	6.9	-1.8	288	6.5	6.2	-2.0	251	2.1	2.0	0.7	77	2.6	-2.5	-0.6	69	4.4	-4.1	-1.6	78	11.4	-11.1	-2.4	87	20.9	-20.9	-1.1			
14	297	2.8	2.5	-1.3	280	5.1	5.0	-0.9	335	1.7	0.7	-1.5	63	0.4	-0.4	-0.2	80	6.2	-6.1	-1.1	97	17.4	-17.3	2.0	85	20.3	-20.2	-1.6			
15	253	6.7	6.4	2.0	267	6.7	6.7	0.3	273	1.8	1.8	-0.1	164	0.7	-0.2	0.7	61	4.8	-4.2	-2.3	86	14.2	-14.2	-1.0	84	23.4	-23.3	-2.5			
16	268	8.2	8.2	0.3	267	7.2	7.2	0.4	282	4.9	4.8	-1.0	323	1.0	0.6	-0.8	102	7.3	-7.1	1.5	73	12.8	-12.2	-3.8	81	19.4	-19.2	-3.1			
17	273	9.0	9.0	-0.5	256	7.3	7.1	1.8	243	3.1	2.8	1.4	255	3.4	3.3	0.9	49	3.7	-2.8	-2.4	49	11.9	-9.0	-7.8	76	26.5	-25.8	-6.2			
18	283	6.7	6.5	-1.5	272	8.7	8.7	-0.3	293	4.8	4.4	-1.9	300	4.8	4.1	-2.4	62	3.2	-2.8	-1.5	86	13.7	-13.7	-1.0	74	21.9	-21.0	-6.1			
19	268	6.2	6.2	0.2	273	6.9	6.9	-0.4	234	1.4	1.1	0.8	127	1.5	-1.2	0.9	102	3.5	-3.4	0.7	108	9.9	-9.4	3.1	84	21.3	-21.2	-2.4			
20	272	9.1	9.1	-0.3	277	9.5	9.4	-1.1	295	5.5	5.0	-2.3	305	2.1	1.7	-1.2	54	5.1	-4.1	-3.0	92	12.7	-12.7	0.5	84	16.5	-16.4	-1.7			
21	269	8.7	8.7	0.1	273	9.6	9.6	-0.5	283	4.9	4.8	-1.1	310	3.8	2.9	-2.4	52	4.2	-3.3	-2.6	88	14.4	-14.4	-0.5	93	26.8	-26.8	1.4			
22	273	7.1	7.1	-0.4	276	9.3	9.2	-1.0	291	6.1	5.7	-2.2	207	1.8	0.8	1.6	69	5.8	-5.4	-2.1	73	12.9	-12.3	-3.8	77	35.0	-34.1	-7.9			
23	291	7.5	7.0	-2.7	279	9.2	9.1	-1.4	279	4.0	4.0	-0.6	292	2.4	2.2	-0.9	79	6.9	-6.8	-1.3	89	15.1	-15.1	-0.3	91	27.1	-27.1	0.5			
24	243	5.6	5.0	2.6	271	7.5	7.5	-0.1	288	6.9	6.6	-2.1	297	1.1	1.0	-0.5	75	7.7	-7.4	-2.0	74	12.6	-12.1	-3.4	90	23.1	-23.1	-0.1			
25	282	7.4	7.2	-1.5	278	8.2	8.1	-1.1	275	5.7	5.7	-0.5	304	3.4	2.8	-1.9	55	9.4	-7.7	-5.4	75	15.4	-14.9	-4.0	87	29.3	-29.3	-1.6			
26	279	6.6	6.5	-1.0	271	9.8	9.8	-0.1	287	5.5	5.3	-1.6	343	2.8	0.8	-2.7	62	7.5	-6.6	-3.5	86	15.0	-15.0	-1.1	92	35.8	-35.8	1.0			
27	268	7.3	7.3	0.3	269	8.4	8.4	0.2	277	4.3	4.3	-0.5	332	3.0	1.4	-2.6	56	8.7	-7.2	-4.8	90	20.6	-20.6	-0.1	84	30.9	-30.8	-3.0			
28	281	5.2	5.1	-1.0	281	7.8	7.7	-1.5	285	4.6	4.4	-1.2	354	2.7	0.3	-2.7	84	11.1	-11.0	-1.1	82	21.0	-20.8	-3.0	107	27.3	-26.1	8.1			
29	280	6.0	5.9	-1.0	270	8.4	8.4	0.0	265	6.3	6.3	0.5	13	0.9	-0.2	-0.9	83	7.7	-7.6	-0.9	79	16.9	-16.6	-3.2	90	33.0	-33.0	-0.1			
30	279	6.8	6.7	-1.1	268	10.1	10.1	0.4	258	5.8	5.7	1.2	227	1.6	1.2	1.1	84	10.0	-9.9	-1.1	90	19.3	-19.3	0.0	89	30.1	-30.1	-0.7			

Daily Normals of Upper Air Winds (1971-2000)

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AURANGABAD

JULY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	269	8.0	8.0	0.2	263	11.4	11.3	1.3	276	9.1	9.1	-0.9	282	1.4	1.4	-0.3	69	7.4	-6.9	-2.7	69	19.1	-17.8	-6.8	85	37.4	-37.3	-3.2			
2	286	7.7	7.4	-2.1	267	8.4	8.4	0.4	264	4.4	4.4	0.5	285	2.7	2.6	-0.7	66	3.7	-3.4	-1.5	105	15.1	-14.6	3.8	92	44.4	-44.4	1.6			
3	274	6.0	6.0	-0.4	260	8.7	8.6	1.5	255	7.3	7.1	1.9	278	3.5	3.5	-0.5	85	7.5	-7.5	-0.6	103	20.9	-20.3	4.8	86	34.3	-34.2	-2.1			
4	279	6.6	6.5	-1.0	264	9.3	9.2	1.0	261	7.2	7.1	1.1	260	3.5	3.4	0.6	92	13.1	-13.1	0.5	90	21.1	-21.1	0.1	80	33.8	-33.3	-6.0			
5	273	7.0	7.0	-0.4	275	10.8	10.8	-1.0	271	7.9	7.9	-0.2	272	6.6	6.6	-0.2	79	10.2	-10.0	-2.0	89	16.0	-16.0	-0.3	96	56.0	-55.7	5.9			
6	282	9.8	9.6	-2.0	270	10.1	10.1	0.0	274	7.5	7.5	-0.5	20	3.3	-1.1	-3.1	78	10.2	-10.0	-2.2	83	19.6	-19.5	-2.3	93	42.0	-41.9	2.3			
7	276	6.7	6.7	-0.7	269	9.0	9.0	0.1	263	7.0	6.9	0.9	267	3.4	3.4	0.2	62	11.4	-10.1	-5.3	75	22.7	-22.0	-5.7	87	47.8	-47.7	-2.3			
8	270	3.8	3.8	0.0	271	7.4	7.4	-0.1	275	5.2	5.2	-0.5	150	0.8	-0.4	0.7	89	13.7	-13.7	-0.2	87	20.0	-20.0	-1.1	90	47.0	-47.0	0.0			
9	270	6.1	6.1	0.0	264	7.4	7.4	0.8	261	6.2	6.1	1.0	225	1.0	0.7	0.7	83	10.7	-10.6	-1.3	77	24.0	-23.4	-5.2	74	35.5	-34.1	-9.7			
10	269	8.2	8.2	0.2	270	9.4	9.4	0.0	276	8.2	8.2	-0.9	180	0.6	0.0	0.6	83	10.3	-10.2	-1.2	86	21.3	-21.2	-1.5	89	30.9	-30.9	-0.7			
11	267	5.3	5.3	0.3	276	8.2	8.2	-0.8	280	6.9	6.8	-1.2	344	1.8	0.5	-1.7	93	6.1	-6.1	0.3	85	23.6	-23.5	-2.1	82	29.9	-29.6	-4.0			
12	264	4.9	4.9	0.5	266	10.6	10.6	0.7	273	5.5	5.5	-0.3	284	0.4	0.4	-0.1	69	8.8	-8.2	-3.1	89	23.6	-23.6	-0.6	79	43.2	-42.5	-7.9			
13	274	6.7	6.7	-0.5	266	10.6	10.6	0.7	266	7.3	7.3	0.5	6	1.0	-0.1	-1.0	91	12.5	-12.5	0.3	83	22.6	-22.4	-2.7	74	48.3	-46.5	-13.0			
14	271	8.1	8.1	-0.1	267	11.0	11.0	0.5	267	6.6	6.6	0.3	34	1.4	-0.8	-1.2	87	15.1	-15.1	-0.7	84	23.3	-23.2	-2.4	88	47.4	-47.4	-1.6			
15	265	7.6	7.6	0.6	264	12.3	12.2	1.2	268	9.2	9.2	0.3	323	2.1	1.3	-1.7	77	11.1	-10.8	-2.5	86	25.3	-25.2	-1.8	73	29.9	-28.6	-8.8			
16	267	6.7	6.7	0.4	261	10.7	10.6	1.7	253	7.8	7.5	2.3	188	0.7	0.1	0.7	71	7.8	-7.4	-2.6	88	21.0	-21.0	-0.9	93	42.9	-42.9	1.9			
17	270	7.2	7.2	0.0	258	11.0	10.8	2.3	256	6.9	6.7	1.7	135	0.4	-0.3	0.3	79	11.5	-11.3	-2.2	93	29.2	-29.2	1.5	125	24.1	-19.7	13.8			
18	270	7.2	7.2	0.0	256	10.0	9.7	2.5	259	10.3	10.1	1.9	223	1.8	1.2	1.3	74	15.2	-14.6	-4.3	81	26.6	-26.3	-4.3	77	46.4	-45.3	-10.1			
19	256	6.8	6.6	1.6	259	10.6	10.4	2.0	265	9.6	9.6	0.9	203	1.5	0.6	1.4	81	11.9	-11.8	-1.8	88	27.0	-27.0	-0.8	81	43.7	-43.2	-6.9			
20	259	7.6	7.5	1.5	266	12.1	12.1	0.8	266	12.8	12.8	0.9	275	2.1	2.1	-0.2	81	13.1	-12.9	-2.1	81	23.9	-23.6	-3.8	78	39.0	-38.2	-7.8			
21	276	18.2	18.1	-1.8	270	11.8	11.8	0.0	274	10.4	10.4	-0.7	297	4.9	4.4	-2.2	69	13.4	-12.5	-4.7	76	24.2	-23.5	-5.9	73	39.3	-37.6	-11.5			
22	265	8.7	8.7	0.8	272	12.0	12.0	-0.4	271	10.2	10.2	-0.1	99	1.3	-1.3	0.2	65	11.0	-10.0	-4.7	82	21.2	-21.0	-3.0	83	40.1	-39.8	-5.1			
23	278	8.4	8.3	-1.2	280	11.9	11.7	-2.1	286	9.2	8.9	-2.5	7	3.4	-0.4	-3.4	81	11.1	-11.0	-1.7	89	20.1	-20.1	-0.5	87	39.9	-39.9	-1.9			
24	287	9.5	9.1	-2.7	273	13.1	13.1	-0.7	274	13.0	13.0	-0.8	264	5.5	5.5	0.6	76	10.8	-10.5	-2.7	87	21.3	-21.3	-1.0	87	45.0	-44.9	-2.2			
25	281	8.1	7.9	-1.6	268	14.7	14.7	0.4	276	11.7	11.6	-1.3	307	1.5	1.2	-0.9	72	9.9	-9.4	-3.1	85	17.9	-17.8	-1.7	83	37.4	-37.1	-4.8			
26	278	8.9	8.8	-1.3	269	12.4	12.4	0.3	279	9.3	9.2	-1.4	309	2.8	2.2	-1.8	57	10.2	-8.5	-5.6	83	23.6	-23.4	-2.9	83	59.0	-58.6	-7.2			
27	270	9.7	9.7	0.0	275	10.6	10.6	-0.9	275	9.0	9.0	-0.8	288	6.3	6.0	-1.9	77	9.5	-9.3	-2.1	76	25.0	-24.3	-5.9	67	43.2	-39.8	-16.9			
28	281	8.1	8.0	-1.5	272	12.4	12.4	-0.4	273	10.5	10.5	-0.5	53	2.1	-1.7	-1.3	81	9.9	-9.8	-1.6	81	18.9	-18.6	-3.1	85	52.8	-52.6	-4.6			
29	269	8.6	8.6	0.2	271	10.8	10.8	-0.2	276	7.9	7.9	-0.8	153	0.2	-0.1	0.2	84	14.6	-14.5	-1.4	87	20.8	-20.8	-1.0	108	44.0	-41.8	13.6			
30	268	7.8	7.8	0.3	265	9.6	9.6	0.8	262	7.8	7.7	1.1	162	0.6	-0.2	0.6	71	10.3	-9.8	-3.3	91	19.6	-19.6	0.2	77	43.1	-41.9	-10.0			
31	279	7.4	7.3	-1.2	264	10.8	10.7	1.1	273	9.4	9.4	-0.5	348	3.8	0.8	-3.7	95	5.7	-5.7	0.5	94	21.9	-21.9	1.4	30	51.0	-25.5	-44.2			

Daily Normals of Upper Air Winds (1971-2000)

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AURANGABAD

AUGUST

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	287	10.1	9.7	-2.9	280	12.1	11.9	-2.0	290	6.7	6.3	-2.3	53	2.5	-2.0	-1.5	66	12.0	-11.0	-4.8	84	21.6	-21.5	-2.3	76	32.0	-31.1	-7.7			
2	281	9.9	9.7	-1.9	269	15.4	15.4	0.2	281	8.1	8.0	-1.5	14	2.1	-0.5	-2.0	89	12.0	-12.0	-0.2	86	23.7	-23.6	-1.8	93	35.7	-35.6	2.1			
3	286	7.1	6.8	-1.9	277	10.9	10.8	-1.3	273	8.6	8.6	-0.4	358	3.3	0.1	-3.3	78	12.6	-12.3	-2.6	77	25.5	-24.8	-5.9	70	38.1	-35.9	-12.8			
4	278	7.2	7.1	-1.0	274	10.7	10.7	-0.7	281	7.8	7.7	-1.5	302	4.7	4.0	-2.5	60	6.7	-5.8	-3.3	86	22.1	-22.0	-1.5	87	38.2	-38.2	-1.9			
5	279	8.0	7.9	-1.2	278	11.3	11.2	-1.5	282	9.6	9.4	-2.0	344	2.5	0.7	-2.4	82	8.3	-8.2	-1.2	67	15.1	-13.9	-5.9	73	35.2	-33.7	-10.3			
6	276	9.0	9.0	-0.9	278	12.2	12.1	-1.6	276	10.9	10.8	-1.1	307	3.0	2.4	-1.8	79	6.9	-6.8	-1.3	71	20.3	-19.2	-6.5	80	30.7	-30.2	-5.5			
7	279	6.7	6.6	-1.0	278	11.4	11.3	-1.5	278	10.4	10.3	-1.5	293	4.3	4.0	-1.7	72	8.2	-7.8	-2.5	83	27.1	-26.9	-3.5	83	48.2	-47.8	-5.9			
8	275	7.4	7.4	-0.6	274	9.6	9.6	-0.6	277	9.5	9.4	-1.1	354	2.0	0.2	-2.0	66	9.0	-8.2	-3.6	82	19.7	-19.5	-2.8	73	32.0	-30.7	-9.1			
9	291	15.9	14.9	-5.6	284	9.2	8.9	-2.3	293	6.7	6.2	-2.6	344	2.9	0.8	-2.8	58	9.5	-8.1	-5.0	72	20.3	-19.3	-6.3	80	37.0	-36.4	-6.4			
10	270	12.3	12.3	-0.1	277	7.5	7.4	-0.9	288	4.4	4.2	-1.4	45	0.8	-0.6	-0.6	79	12.2	-12.0	-2.3	78	21.5	-21.0	-4.4	111	30.0	-28.0	10.8			
11	280	7.7	7.6	-1.4	270	8.4	8.4	0.0	272	6.7	6.7	-0.2	274	1.5	1.5	-0.1	82	11.4	-11.3	-1.5	103	22.0	-21.4	4.9	97	40.1	-39.8	5.2			
12	274	7.8	7.8	-0.6	271	9.7	9.7	-0.1	272	9.2	9.2	-0.3	273	5.1	5.1	-0.3	79	10.4	-10.2	-2.0	98	24.0	-23.7	3.5	69	30.7	-28.6	-11.1			
13	268	8.9	8.9	0.3	268	11.3	11.3	0.3	273	11.0	11.0	-0.5	352	2.8	0.4	-2.8	83	13.1	-13.0	-1.5	90	19.8	-19.8	0.1	78	36.9	-36.1	-7.5			
14	270	8.8	8.8	0.0	271	10.3	10.3	-0.2	281	9.0	8.8	-1.7	342	4.4	1.4	-4.2	67	9.0	-8.3	-3.5	90	18.5	-18.5	0.1	90	31.2	-31.2	-0.2			
15	296	7.8	7.0	-3.4	282	8.9	8.7	-1.9	282	8.0	7.8	-1.6	46	3.0	-2.2	-2.1	94	13.8	-13.8	0.9	92	15.2	-15.2	0.5	—	—	—	—			
16	291	7.3	6.8	-2.6	277	9.5	9.4	-1.2	295	5.2	4.7	-2.2	302	2.2	1.9	-1.2	72	8.1	-7.7	-2.5	80	17.7	-17.4	-3.1	77	32.7	-31.9	-7.1			
17	283	8.2	8.0	-1.9	280	8.6	8.5	-1.5	287	6.7	6.4	-1.9	18	1.6	-0.5	-1.5	99	11.0	-10.9	1.7	90	18.5	-18.5	0.0	62	39.0	-34.4	-18.3			
18	286	6.1	5.9	-1.7	276	8.3	8.3	-0.9	285	5.1	4.9	-1.3	103	2.7	-2.6	0.6	88	7.0	-7.0	-0.2	74	12.7	-12.2	-3.4	71	27.4	-26.0	-8.8			
19	285	7.3	7.1	-1.9	278	9.0	8.9	-1.3	278	8.1	8.0	-1.1	330	3.4	1.7	-2.9	85	8.2	-8.2	-0.7	77	20.4	-19.9	-4.7	77	39.0	-38.0	-8.8			
20	285	5.5	5.3	-1.4	269	9.8	9.8	0.1	262	7.5	7.4	1.1	245	2.3	2.1	1.0	85	8.8	-8.8	-0.7	81	19.4	-19.2	-3.0	91	27.7	-27.7	0.7			
21	299	5.6	4.9	-2.7	283	8.7	8.5	-1.9	285	5.9	5.7	-1.5	90	0.6	-0.6	0.0	86	10.1	-10.1	-0.7	82	24.1	-23.8	-3.5	84	40.7	-40.5	-4.0			
22	295	5.3	4.8	-2.2	281	8.5	8.3	-1.6	279	9.3	9.2	-1.4	360	1.8	0.0	-1.8	75	10.3	-10.0	-2.6	86	22.9	-22.9	-1.5	85	43.3	-43.2	-3.4			
23	293	7.1	6.5	-2.8	279	7.6	7.5	-1.2	266	6.4	6.4	0.4	308	3.1	2.4	-1.9	109	7.7	-7.3	2.5	66	20.8	-18.9	-8.6	85	29.9	-29.8	-2.6			
24	292	6.8	6.3	-2.6	277	8.4	8.3	-1.0	260	4.8	4.7	0.8	272	2.9	2.9	-0.1	86	9.6	-9.6	-0.7	96	22.9	-22.8	2.3	87	34.3	-34.3	-1.7			
25	280	8.7	8.6	-1.5	272	9.3	9.3	-0.3	263	8.2	8.1	1.0	260	4.0	3.9	0.7	83	7.9	-7.8	-0.9	88	14.4	-14.4	-0.4	106	26.0	-25.0	7.2			
26	290	6.4	6.0	-2.2	276	8.2	8.2	-0.9	274	7.9	7.9	-0.5	308	4.9	3.9	-3.0	89	11.4	-11.4	-0.2	83	20.7	-20.5	-2.5	83	32.5	-32.3	-4.0			
27	279	8.3	8.2	-1.3	271	12.4	12.4	-0.3	287	9.6	9.2	-2.8	243	8.9	7.9	4.1	66	8.3	-7.6	-3.4	82	19.8	-19.6	-2.6	85	28.9	-28.8	-2.7			
28	271	8.2	8.2	-0.1	277	9.8	9.7	-1.2	288	7.6	7.2	-2.3	325	6.4	3.7	-5.2	74	11.9	-11.5	-3.2	81	20.9	-20.6	-3.4	77	28.8	-28.1	-6.5			
29	301	9.1	7.8	-4.6	283	9.5	9.2	-2.2	282	8.5	8.3	-1.7	67	4.8	-4.4	-1.9	85	13.6	-13.5	-1.2	69	21.0	-19.6	-7.4	92	52.0	-52.0	1.8			
30	286	7.0	6.7	-1.9	287	9.1	8.7	-2.6	290	6.4	6.0	-2.2	21	3.3	-1.2	-3.1	84	14.5	-14.4	-1.4	84	23.8	-23.7	-2.3	63	37.4	-33.4	-16.8			
31	287	7.2	6.9	-2.1	285	8.6	8.3	-2.3	285	5.2	5.0	-1.3	76	3.0	-2.9	-0.7	80	10.0	-9.8	-1.8	86	17.9	-17.9	-1.3	103	27.2	-26.5	6.1			

Daily Normals of Upper Air Winds (1971-2000)

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AURANGABAD

SEPTEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	291	6.3	5.9	-2.3	277	9.0	8.9	-1.1	265	3.4	3.4	0.3	48	2.8	-2.1	-1.9	64	8.4	-7.5	-3.7	80	20.4	-20.1	-3.5	73	29.5	-28.2	-8.6			
2	285	9.2	8.9	-2.4	280	9.3	9.2	-1.6	272	8.0	8.0	-0.3	270	1.0	1.0	0.0	123	4.6	-3.9	2.5	88	18.1	-18.1	-0.7	84	23.1	-23.0	-2.3			
3	274	9.8	9.8	-0.6	276	10.2	10.1	-1.1	274	8.1	8.1	-0.5	326	1.8	1.0	-1.5	91	9.4	-9.4	0.1	89	20.5	-20.5	-0.2	94	34.5	-34.4	2.2			
4	293	8.1	7.4	-3.2	282	8.4	8.2	-1.8	275	6.3	6.3	-0.5	290	3.3	3.1	-1.1	70	9.6	-9.0	-3.2	101	20.7	-20.3	4.0	91	18.0	-18.0	0.3			
5	286	7.8	7.5	-2.1	288	6.8	6.5	-2.1	289	6.5	6.1	-2.1	318	2.7	1.8	-2.0	70	9.4	-8.8	-3.2	75	15.6	-15.1	-4.0	76	30.2	-29.3	-7.2			
6	282	8.4	8.2	-1.7	288	7.7	7.3	-2.4	297	6.3	5.6	-2.8	339	1.4	0.5	-1.3	71	7.9	-7.5	-2.6	87	18.8	-18.8	-1.1	76	24.4	-23.7	-5.8			
7	284	6.3	6.1	-1.5	286	6.9	6.6	-1.9	285	6.0	5.8	-1.6	259	4.4	4.3	0.8	70	8.0	-7.5	-2.7	88	14.9	-14.9	-0.6	99	29.9	-29.6	4.5			
8	286	7.6	7.3	-2.1	287	6.6	6.3	-1.9	294	5.6	5.1	-2.3	309	2.2	1.7	-1.4	71	7.5	-7.1	-2.4	102	16.5	-16.1	3.4	100	31.0	-30.5	5.4			
9	287	6.1	5.8	-1.8	302	5.5	4.7	-2.9	272	4.7	4.7	-0.2	263	2.3	2.3	0.3	73	7.9	-7.6	-2.3	98	14.0	-13.9	1.9	83	21.7	-21.5	-2.6			
10	295	4.5	4.1	-1.9	297	4.5	4.0	-2.0	279	3.0	3.0	-0.5	360	2.2	0.0	-2.2	85	6.8	-6.8	-0.6	94	15.6	-15.6	1.1	86	28.0	-27.9	-2.1			
11	301	6.0	5.1	-3.1	301	5.5	4.7	-2.8	268	2.7	2.7	0.1	248	1.1	1.0	0.4	79	7.6	-7.4	-1.5	99	15.3	-15.1	2.3	81	14.2	-14.0	-2.1			
12	295	5.9	5.3	-2.5	314	4.0	2.9	-2.8	267	2.0	2.0	0.1	180	0.3	0.0	0.3	77	8.6	-8.4	-1.9	88	16.2	-16.2	-0.5	83	23.5	-23.3	-2.8			
13	301	6.6	5.7	-3.4	304	4.5	3.7	-2.5	288	2.5	2.4	-0.8	297	2.2	2.0	-1.0	75	7.2	-6.9	-1.9	99	16.8	-16.6	2.7	82	21.2	-21.0	-3.0			
14	303	5.9	4.9	-3.2	309	5.0	3.9	-3.2	296	3.2	2.9	-1.4	323	0.5	0.3	-0.4	79	6.8	-6.7	-1.3	101	13.6	-13.4	2.5	81	21.5	-21.2	-3.3			
15	302	6.1	5.2	-3.2	312	6.2	4.6	-4.2	298	2.7	2.4	-1.3	9	3.0	-0.5	-3.0	77	5.7	-5.6	-1.3	95	13.6	-13.6	1.1	76	25.6	-24.8	-6.2			
16	304	6.1	5.1	-3.4	320	4.5	2.9	-3.4	26	2.5	-1.1	-2.3	307	1.5	1.2	-0.9	69	4.5	-4.2	-1.6	80	11.2	-11.0	-1.9	87	28.0	-28.0	-1.4			
17	297	6.1	5.4	-2.8	309	4.8	3.7	-3.0	289	2.8	2.6	-0.9	333	0.9	0.4	-0.8	90	7.0	-7.0	0.0	79	11.5	-11.3	-2.1	93	26.8	-26.8	1.2			
18	303	6.3	5.3	-3.4	330	3.9	2.0	-3.4	342	1.9	0.6	-1.8	50	0.8	-0.6	-0.5	102	5.9	-5.8	1.2	110	14.4	-13.5	4.9	98	20.6	-20.4	3.0			
19	313	5.7	4.2	-3.9	330	3.4	1.7	-2.9	315	1.3	0.9	-0.9	239	1.7	1.5	0.9	105	5.8	-5.6	1.5	102	10.5	-10.3	2.2	149	9.4	-4.9	8.0			
20	335	6.1	2.6	-5.5	338	3.5	1.3	-3.2	335	1.9	0.8	-1.7	284	2.5	2.4	-0.6	92	3.6	-3.6	0.1	96	12.7	-12.6	1.4	106	22.6	-21.7	6.3			
21	342	5.6	1.7	-5.3	334	2.5	1.1	-2.3	301	0.6	0.5	-0.3	45	0.4	-0.3	-0.3	94	5.3	-5.3	0.4	104	10.5	-10.2	2.6	103	14.8	-14.4	3.4			
22	324	4.4	2.6	-3.6	304	3.2	2.7	-1.8	277	2.6	2.6	-0.3	214	0.4	0.2	0.3	113	7.1	-6.5	2.8	114	5.9	-5.4	2.4	93	18.7	-18.7	1.1			
23	313	5.0	3.7	-3.4	320	3.5	2.3	-2.7	276	0.9	0.9	-0.1	243	0.7	0.6	0.3	98	5.7	-5.6	0.8	107	9.9	-9.5	2.9	86	13.4	-13.4	-1.0			
24	320	4.0	2.6	-3.1	339	3.9	1.4	-3.6	342	1.3	0.4	-1.2	284	0.8	0.8	-0.2	99	6.6	-6.5	1.0	94	10.3	-10.3	0.7	89	14.5	-14.5	-0.2			
25	357	3.8	0.2	-3.8	8	3.5	-0.5	-3.5	18	2.6	-0.8	-2.5	65	1.4	-1.3	-0.6	99	1.8	-1.8	0.3	118	10.0	-8.8	4.7	111	15.0	-14.0	5.3			
26	346	3.2	0.8	-3.1	16	3.2	-0.9	-3.1	45	2.0	-1.4	-1.4	315	1.4	1.0	-1.0	103	3.2	-3.1	0.7	123	6.3	-5.3	3.4	128	15.0	-11.8	9.2			
27	15	3.0	-0.8	-2.9	28	2.7	-1.3	-2.4	33	2.0	-1.1	-1.7	270	0.3	0.3	0.0	162	5.5	-1.7	5.2	128	7.3	-5.7	4.5	115	11.8	-10.7	4.9			
28	6	2.7	-0.3	-2.7	13	4.7	-1.1	-4.6	21	1.9	-0.7	-1.8	225	1.6	1.1	1.1	137	2.2	-1.5	1.6	158	6.4	-2.4	5.9	125	19.4	-15.8	11.2			
29	32	4.0	-2.1	-3.4	16	3.6	-1.0	-3.5	22	3.5	-1.3	-3.2	74	0.7	-0.7	-0.2	122	1.3	-1.1	0.7	125	5.0	-4.1	2.9	64	5.1	-4.6	-2.2			
30	350	3.6	0.6	-3.5	11	3.7	-0.7	-3.6	31	2.1	-1.1	-1.8	331	1.8	0.9	-1.6	291	1.4	1.3	-0.5	152	3.6	-1.7	3.2	108	15.3	-14.6	4.7			

Daily Normals of Upper Air Winds (1971-2000)

AURANGABAD

OCTOBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	18	0.6	-0.2	-0.6	9	3.3	-0.5	-3.3	27	2.8	-1.3	-2.5	53	2.6	-2.1	-1.6	74	0.7	-0.7	-0.2	179	5.2	-0.1	5.2	102	17.8	-17.4	3.6
2	7	3.5	-0.4	-3.5	17	4.7	-1.4	-4.5	24	3.6	-1.5	-3.3	333	2.0	0.9	-1.8	178	3.4	-0.1	3.4	174	4.8	-0.5	4.8	102	11.8	-11.5	2.5
3	350	3.6	0.6	-3.5	16	4.5	-1.2	-4.3	41	2.3	-1.5	-1.7	76	1.2	-1.2	-0.3	200	2.9	1.0	2.7	172	5.7	-0.8	5.6	129	8.3	-6.5	5.2
4	337	3.9	1.5	-3.6	3	4.3	-0.2	-4.3	346	3.2	0.8	-3.1	344	1.5	0.4	-1.4	241	2.1	1.8	1.0	170	6.1	-1.1	6.0	97	7.8	-7.7	1.0
5	328	4.0	2.1	-3.4	21	3.9	-1.4	-3.6	13	0.9	-0.2	-0.9	346	0.8	0.2	-0.8	239	2.7	2.3	1.4	195	3.9	1.0	3.8	96	11.7	-11.6	1.2
6	357	3.7	0.2	-3.7	5	3.3	-0.3	-3.3	360	0.8	0.0	-0.8	340	4.4	1.5	-4.1	331	2.6	1.3	-2.3	223	7.9	5.4	5.7	136	3.7	-2.6	2.7
7	360	3.9	0.0	-3.9	356	3.1	0.2	-3.1	341	1.8	0.6	-1.7	306	4.1	3.3	-2.4	232	6.8	5.3	4.2	217	6.0	3.6	4.8	124	8.5	-7.1	4.7
8	10	2.9	-0.5	-2.9	16	1.9	-0.5	-1.8	34	1.4	-0.8	-1.2	331	2.5	1.2	-2.2	306	4.3	3.5	-2.5	200	8.4	2.9	7.9	93	9.0	-9.0	0.5
9	13	3.2	-0.7	-3.1	19	3.1	-1.0	-2.9	25	4.5	-1.9	-4.1	356	1.6	0.1	-1.6	254	5.7	5.5	1.6	225	5.2	3.7	3.7	103	5.2	-5.1	1.2
10	261	1.2	1.2	0.2	14	2.1	-0.5	-2.0	54	1.9	-1.5	-1.1	53	0.5	-0.4	-0.3	256	4.1	4.0	1.0	165	5.9	-1.5	5.7	118	5.5	-4.9	2.6
11	19	2.4	-0.8	-2.3	25	3.8	-1.6	-3.5	67	2.1	-1.9	-0.8	170	1.1	-0.2	1.1	229	4.6	3.5	3.0	213	6.9	3.7	5.8	154	5.3	-2.3	4.8
12	311	2.9	2.2	-1.9	14	3.6	-0.9	-3.5	18	1.6	-0.5	-1.5	276	2.9	2.9	-0.3	242	4.0	3.5	1.9	217	6.2	3.7	5.0	292	5.4	5.0	-2.0
13	317	2.3	1.6	-1.7	27	3.8	-1.7	-3.4	12	2.5	-0.5	-2.4	356	1.4	0.1	-1.4	243	7.2	6.4	3.3	209	11.0	5.3	9.6	239	2.6	2.2	1.3
14	2	3.1	-0.1	-3.1	21	4.0	-1.4	-3.7	11	2.1	-0.4	-2.1	297	4.5	4.0	-2.0	228	6.6	4.9	4.4	199	11.1	3.6	10.5	225	1.6	1.1	1.1
15	340	3.5	1.2	-3.3	9	3.7	-0.6	-3.7	329	1.2	0.6	-1.0	309	2.6	2.0	-1.6	262	6.0	5.9	0.8	200	10.6	3.7	9.9	172	3.5	-0.5	3.5
16	13	3.2	-0.7	-3.1	27	3.3	-1.5	-2.9	39	2.1	-1.3	-1.6	339	3.1	1.1	-2.9	236	5.0	4.1	2.8	201	9.1	3.2	8.5	167	6.6	-1.5	6.4
17	357	4.4	0.2	-4.4	24	3.2	-1.3	-2.9	25	1.7	-0.7	-1.5	344	3.2	0.9	-3.1	262	4.9	4.9	0.7	206	7.1	3.1	6.4	107	4.9	-4.7	1.4
18	5	3.3	-0.3	-3.3	32	3.6	-1.9	-3.1	18	4.1	-1.3	-3.9	22	3.2	-1.2	-3.0	249	5.9	5.5	2.1	220	11.4	7.4	8.7	205	4.1	1.7	3.7
19	342	3.2	1.0	-3.0	29	3.8	-1.8	-3.3	14	2.9	-0.7	-2.8	329	1.7	0.9	-1.5	254	7.7	7.4	2.1	212	9.7	5.2	8.2	112	13.3	-12.4	4.9
20	338	2.4	0.9	-2.2	24	3.5	-1.4	-3.2	2	3.6	-0.1	-3.6	316	3.6	2.5	-2.6	243	7.0	6.2	3.2	218	7.5	4.6	5.9	149	6.3	-3.2	5.4
21	337	4.0	1.6	-3.7	34	3.0	-1.7	-2.5	27	2.9	-1.3	-2.6	295	1.7	1.5	-0.7	262	6.7	6.6	0.9	227	4.9	3.6	3.3	143	4.0	-2.4	3.2
22	19	2.8	-0.9	-2.6	38	3.6	-2.2	-2.8	23	3.0	-1.2	-2.8	306	0.9	0.7	-0.5	260	5.4	5.3	0.9	222	8.9	5.9	6.6	130	6.2	-4.7	4.0
23	11	2.1	-0.4	-2.1	43	3.4	-2.3	-2.5	6	2.0	-0.2	-2.0	293	2.8	2.6	-1.1	267	7.3	7.3	0.4	217	12.2	7.4	9.7	138	5.0	-3.3	3.7
24	42	2.7	-1.8	-2.0	63	3.7	-3.3	-1.7	99	0.6	-0.6	0.1	292	2.4	2.2	-0.9	255	9.7	9.4	2.5	237	12.1	10.2	6.6	128	7.6	-6.0	4.7
25	18	2.3	-0.7	-2.2	50	3.4	-2.6	-2.2	157	0.8	-0.3	0.7	287	4.2	4.0	-1.2	251	11.0	10.4	3.5	240	14.0	12.1	7.1	211	5.2	2.7	4.5
26	344	2.2	0.6	-2.1	47	2.3	-1.7	-1.6	14	0.4	-0.1	-0.4	287	3.4	3.2	-1.0	251	13.4	12.7	4.4	224	16.8	11.7	12.1	182	2.9	0.1	2.9
27	31	2.6	-1.3	-2.2	37	3.0	-1.8	-2.4	4	1.3	-0.1	-1.3	330	3.9	2.0	-3.4	263	11.1	11.0	1.4	236	13.0	10.7	7.3	—	—	—	—
28	20	2.0	-0.7	-1.9	50	3.9	-3.0	-2.5	25	1.9	-0.8	-1.7	326	2.3	1.3	-1.9	262	10.1	10.0	1.4	232	17.1	13.5	10.5	153	4.5	-2.0	4.0
29	11	3.2	-0.6	-3.1	43	3.8	-2.6	-2.8	39	2.8	-1.8	-2.2	263	3.8	3.8	0.5	254	10.9	10.5	3.0	246	17.0	15.5	6.9	252	2.2	2.1	0.7
30	9	3.7	-0.6	-3.7	57	3.8	-3.2	-2.1	72	3.5	-3.3	-1.1	245	2.1	1.9	0.9	261	8.4	8.3	1.3	238	15.2	12.9	8.0	127	2.1	-1.7	1.3
31	40	3.9	-2.5	-3.0	68	4.8	-4.5	-1.8	36	3.1	-1.8	-2.5	306	4.3	3.5	-2.5	264	13.8	13.7	1.5	245	21.7	19.6	9.3	229	5.7	4.3	3.7

Daily Normals of Upper Air Winds (1971-2000)

AURANGABAD

NOVEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	41	3.5	-2.3	-2.6	51	4.3	-3.3	-2.7	41	3.2	-2.1	-2.4	321	5.3	3.3	-4.1	261	12.5	12.4	1.9	243	15.4	13.7	7.0	248	6.1	5.7	2.3			
2	50	4.5	-3.4	-2.9	69	4.0	-3.7	-1.4	56	2.2	-1.8	-1.2	351	2.6	0.4	-2.6	265	12.2	12.2	1.0	220	11.9	7.6	9.1	71	7.0	-6.6	-2.3			
3	50	8.2	-6.3	-5.3	62	3.4	-3.0	-1.6	67	2.1	-1.9	-0.8	310	4.2	3.2	-2.7	261	19.6	19.3	3.2	246	21.1	19.2	8.7	229	15.3	11.5	10.1			
4	77	6.6	-6.4	-1.5	70	3.5	-3.3	-1.2	50	1.7	-1.3	-1.1	276	5.8	5.8	-0.6	257	13.1	12.8	2.9	236	14.0	11.6	7.8	196	9.1	2.5	8.8			
5	27	3.0	-1.4	-2.7	50	3.8	-2.9	-2.4	28	3.0	-1.4	-2.6	292	6.3	5.8	-2.4	260	13.3	13.1	2.3	235	19.4	15.9	11.1	175	3.6	-0.3	3.6			
6	17	2.4	-0.7	-2.3	45	3.8	-2.7	-2.7	27	3.4	-1.5	-3.0	332	5.1	2.4	-4.5	265	14.9	14.9	1.2	236	17.7	14.6	10.0	278	0.7	0.7	-0.1			
7	25	2.3	-1.0	-2.1	54	4.2	-3.4	-2.5	43	1.8	-1.2	-1.3	329	3.1	1.6	-2.7	269	10.5	10.5	0.1	239	19.2	16.4	9.9	208	5.3	2.5	4.7			
8	49	1.8	-1.4	-1.2	51	3.2	-2.5	-2.0	45	1.8	-1.3	-1.3	284	4.6	4.5	-1.1	265	14.7	14.6	1.3	244	22.2	20.0	9.6	46	3.7	-2.7	-2.6			
9	355	1.1	0.1	-1.1	45	1.7	-1.2	-1.2	21	1.4	-0.5	-1.3	316	4.2	2.9	-3.0	272	17.4	17.4	-0.7	244	18.9	16.9	8.4	303	8.8	7.4	-4.8			
10	270	1.1	1.1	0.0	36	0.9	-0.5	-0.7	302	1.3	1.1	-0.7	283	4.9	4.8	-1.1	283	13.0	12.6	-3.0	251	16.9	16.0	5.4	277	6.4	6.3	-0.8			
11	355	2.3	0.2	-2.3	36	1.7	-1.0	-1.4	346	1.6	0.4	-1.6	303	6.8	5.7	-3.7	264	13.3	13.2	1.3	254	16.0	15.4	4.5	213	7.4	4.1	6.2			
12	17	1.4	-0.4	-1.3	54	2.4	-1.9	-1.4	9	3.0	-0.5	-3.0	322	4.4	2.7	-3.5	278	15.0	14.9	-2.1	247	20.6	19.0	8.0	246	9.9	9.1	4.0			
13	45	1.1	-0.8	-0.8	52	3.4	-2.7	-2.1	48	4.5	-3.3	-3.0	4	7.9	-0.5	-7.9	274	10.4	10.4	-0.7	261	21.4	21.1	3.5	286	18.9	18.2	-5.1			
14	14	2.5	-0.6	-2.4	60	3.2	-2.8	-1.6	50	3.3	-2.5	-2.1	331	2.5	1.2	-2.2	258	12.1	11.8	2.5	244	22.3	20.1	9.6	230	12.0	9.2	7.7			
15	58	3.2	-2.7	-1.7	63	3.6	-3.2	-1.6	41	3.5	-2.3	-2.6	322	3.4	2.1	-2.7	264	14.0	13.9	1.5	248	16.2	15.1	6.0	271	8.3	8.3	-0.1			
16	41	2.9	-1.9	-2.2	63	4.2	-3.8	-1.9	77	2.3	-2.2	-0.5	273	1.8	1.8	-0.1	258	11.5	11.2	2.4	245	24.5	22.2	10.4	267	1.7	1.7	0.1			
17	82	2.8	-2.8	-0.4	76	2.9	-2.8	-0.7	153	0.2	-0.1	0.2	247	3.9	3.6	1.5	253	12.2	11.7	3.6	250	20.5	19.2	7.1	237	6.4	5.3	3.5			
18	9	1.3	-0.2	-1.3	74	1.9	-1.8	-0.5	219	0.6	0.4	0.5	251	5.7	5.4	1.9	260	12.7	12.5	2.1	249	18.3	17.1	6.4	225	5.5	3.9	3.9			
19	53	1.0	-0.8	-0.6	29	1.8	-0.9	-1.6	297	1.8	1.6	-0.8	291	8.8	8.2	-3.2	270	14.2	14.2	0.0	251	21.9	20.7	7.0	298	5.4	4.8	-2.5			
20	73	2.4	-2.3	-0.7	34	2.2	-1.2	-1.8	321	3.8	2.4	-3.0	289	7.3	6.9	-2.4	270	15.2	15.2	0.0	258	16.9	16.5	3.6	244	13.3	11.9	5.9			
21	62	1.5	-1.3	-0.7	27	1.1	-0.5	-1.0	309	2.2	1.7	-1.4	263	6.9	6.9	0.8	269	20.9	20.9	0.3	231	27.0	21.0	17.0	258	13.2	12.9	2.8			
22	118	2.1	-1.9	1.0	82	2.7	-2.7	-0.4	16	0.7	-0.2	-0.7	288	7.5	7.1	-2.3	256	22.0	21.4	5.2	244	29.3	26.4	12.8	244	11.8	10.6	5.1			
23	36	1.4	-0.8	-1.1	69	1.9	-1.8	-0.7	11	1.5	-0.3	-1.5	291	6.5	6.1	-2.3	269	19.4	19.4	0.4	249	29.7	27.7	10.6	230	11.7	8.9	7.6			
24	34	1.4	-0.8	-1.2	56	1.4	-1.2	-0.8	287	1.7	1.6	-0.5	281	7.8	7.7	-1.5	269	20.5	20.5	0.4	256	26.9	26.1	6.5	25	7.0	-3.0	-6.3			
25	298	1.7	1.5	-0.8	101	1.0	-1.0	0.2	281	1.6	1.6	-0.3	281	7.8	7.7	-1.5	259	18.0	17.7	3.3	254	26.1	25.1	7.0	255	7.5	7.3	1.9			
26	297	0.7	0.6	-0.3	86	1.5	-1.5	-0.1	336	1.0	0.4	-0.9	280	8.8	8.7	-1.5	265	18.8	18.7	1.7	260	25.8	25.4	4.7	295	9.3	8.4	-4.0			
27	350	1.1	0.2	-1.1	69	0.9	-0.8	-0.3	302	2.5	2.1	-1.3	272	10.3	10.3	-0.3	259	24.0	23.5	4.7	243	32.3	28.8	14.6	323	5.8	3.5	-4.6			
28	344	0.7	0.2	-0.7	75	1.6	-1.5	-0.4	322	3.1	1.9	-2.4	283	10.0	9.8	-2.2	256	21.5	20.8	5.3	242	26.1	23.0	12.3	253	7.1	6.8	2.1			
29	254	0.7	0.7	0.2	72	0.9	-0.9	-0.3	293	2.5	2.3	-1.0	279	9.7	9.6	-1.5	261	23.7	23.4	3.5	248	30.5	28.3	11.5	51	2.7	-2.1	-1.7			
30	276	0.9	0.9	-0.1	25	1.7	-0.7	-1.5	289	1.8	1.7	-0.6	273	10.2	10.2	-0.5	263	22.0	21.8	2.7	262	31.4	31.1	4.1	241	11.5	10.1	5.5			

Daily Normals of Upper Air Winds (1971-2000)

48

AURANGABAD

DECEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	20	1.2	-0.4	-1.1	62	1.9	-1.7	-0.9	275	1.2	1.2	-0.1	268	10.0	10.0	0.4	262	24.5	24.2	3.6	235	32.3	26.5	18.4	261	15.1	14.9	2.4			
2	360	1.2	0.0	-1.2	76	1.6	-1.6	-0.4	243	1.1	1.0	0.5	257	8.1	7.9	1.8	246	21.4	19.6	8.6	239	26.9	23.0	13.9	279	12.7	12.6	-1.9			
3	9	0.6	-0.1	-0.6	84	0.9	-0.9	-0.1	254	2.6	2.5	0.7	272	11.6	11.6	-0.4	264	20.4	20.3	2.0	243	19.3	17.2	8.7	214	6.1	3.4	5.1			
4	8	0.7	-0.1	-0.7	57	1.7	-1.4	-0.9	295	1.9	1.7	-0.8	276	8.1	8.0	-0.9	240	17.2	15.0	8.5	232	22.0	17.3	13.6	269	7.8	7.8	0.2			
5	180	0.4	0.0	0.4	56	1.1	-0.9	-0.6	304	3.7	3.1	-2.1	277	9.0	8.9	-1.1	257	21.0	20.4	4.8	246	24.2	22.1	9.8	264	8.9	8.9	0.9			
6	86	1.4	-1.4	-0.1	86	1.5	-1.5	-0.1	304	3.4	2.8	-1.9	283	7.7	7.5	-1.7	255	22.4	21.6	5.9	253	26.5	25.3	7.9	263	17.3	17.2	2.2			
7	60	2.0	-1.7	-1.0	58	2.2	-1.9	-1.2	331	2.6	1.3	-2.3	264	8.1	8.1	0.8	261	20.4	20.2	3.1	247	26.5	24.5	10.2	255	24.0	23.2	6.2			
8	65	3.1	-2.8	-1.3	74	1.8	-1.7	-0.5	281	1.5	1.5	-0.3	253	7.9	7.6	2.3	251	25.1	23.8	8.0	238	35.1	29.9	18.4	258	23.0	22.5	4.8			
9	20	1.2	-0.4	-1.1	82	0.7	-0.7	-0.1	256	2.5	2.4	0.6	267	10.3	10.3	0.5	261	20.7	20.4	3.3	236	22.9	19.1	12.7	239	13.4	11.5	6.8			
10	27	1.8	-0.8	-1.6	56	2.3	-1.9	-1.3	338	0.5	0.2	-0.5	275	6.6	6.6	-0.6	244	21.2	19.0	9.4	239	27.6	23.5	14.4	127	11.0	-8.8	6.6			
11	68	2.9	-2.7	-1.1	90	3.0	-3.0	0.0	191	1.0	0.2	1.0	263	8.4	8.3	1.0	257	19.7	19.2	4.4	242	31.4	27.8	14.5	250	23.7	22.2	8.3			
12	77	0.9	-0.9	-0.2	90	2.2	-2.2	0.0	234	0.9	0.7	0.5	267	9.2	9.2	0.5	257	18.0	17.5	4.1	234	22.3	18.0	13.1	257	5.7	5.6	1.3			
13	100	1.1	-1.1	0.2	40	0.8	-0.5	-0.6	306	2.2	1.8	-1.3	277	8.2	8.1	-1.0	263	18.7	18.6	2.2	248	24.9	23.1	9.2	262	7.5	7.4	1.0			
14	52	1.6	-1.3	-1.0	59	1.7	-1.5	-0.9	321	1.9	1.2	-1.5	287	9.8	9.4	-2.8	260	22.3	22.0	3.7	256	26.8	26.0	6.7	268	16.0	16.0	0.6			
15	76	5.3	-5.1	-1.3	74	2.2	-2.1	-0.6	16	2.2	-0.6	-2.1	285	7.9	7.6	-2.1	268	21.3	21.3	0.7	273	25.3	25.3	-1.2	250	17.0	16.0	5.8			
16	90	0.5	-0.5	0.0	115	1.9	-1.7	0.8	349	1.6	0.3	-1.6	277	7.7	7.6	-0.9	270	15.5	15.5	0.1	262	23.7	23.5	3.3	243	13.2	11.8	6.0			
17	59	1.7	-1.5	-0.9	62	2.6	-2.3	-1.2	315	2.4	1.7	-1.7	278	10.9	10.8	-1.6	272	20.1	20.1	-0.7	248	27.5	25.4	10.5	237	11.5	9.7	6.2			
18	110	2.0	-1.9	0.7	97	2.6	-2.6	0.3	287	1.0	1.0	-0.3	293	5.9	5.4	-2.3	262	26.4	26.1	3.7	252	38.5	36.7	11.7	257	22.5	21.9	5.1			
19	56	1.1	-0.9	-0.6	45	1.1	-0.8	-0.8	309	2.7	2.1	-1.7	268	9.1	9.1	0.3	264	25.7	25.6	2.7	250	32.7	30.6	11.4	263	24.7	24.5	3.1			
20	56	0.7	-0.6	-0.4	83	2.3	-2.3	-0.3	225	0.1	0.1	0.1	282	9.2	9.0	-1.9	269	23.9	23.9	0.4	259	28.8	28.3	5.5	246	15.0	13.7	6.1			
21	135	0.3	-0.2	0.2	101	1.5	-1.5	0.3	301	0.6	0.5	-0.3	269	8.7	8.7	0.1	259	23.9	23.4	4.7	266	23.1	23.0	1.7	249	12.6	11.8	4.5			
22	283	0.9	0.9	-0.2	18	0.6	-0.2	-0.6	289	1.8	1.7	-0.6	275	9.9	9.9	-0.9	265	23.8	23.7	2.1	270	25.4	25.4	0.2	259	8.4	8.2	1.6			
23	336	1.2	0.5	-1.1	90	0.1	-0.1	0.0	263	5.2	5.2	0.6	265	14.9	14.8	1.4	265	30.7	30.6	2.5	258	26.6	26.0	5.7	238	16.1	13.7	8.4			
24	231	1.4	1.1	0.9	236	0.4	0.3	0.2	283	4.9	4.8	-1.1	274	12.8	12.8	-1.0	261	24.2	23.9	3.9	260	30.2	29.7	5.3	256	27.3	26.5	6.4			
25	83	0.8	-0.8	-0.1	153	0.2	-0.1	0.2	252	4.2	4.0	1.3	275	11.7	11.6	-1.1	258	31.3	30.6	6.7	258	34.3	33.5	7.4	219	24.5	15.4	19.0			
26	117	1.1	-1.0	0.5	108	1.3	-1.2	0.4	259	3.7	3.6	0.7	268	10.8	10.8	0.3	274	28.5	28.4	-1.9	268	29.7	29.7	0.8	262	22.5	22.3	3.1			
27	225	0.3	0.2	0.2	139	0.9	-0.6	0.7	247	3.6	3.3	1.4	261	13.0	12.8	2.0	274	26.4	26.3	-1.9	256	36.7	35.6	8.9	287	19.5	18.7	-5.6			
28	79	2.0	-2.0	-0.4	90	0.1	-0.1	0.0	259	3.3	3.2	0.6	276	9.8	9.7	-1.1	260	28.0	27.6	4.8	254	36.2	34.9	9.7	327	5.0	2.7	-4.2			
29	270	0.8	0.8	0.0	153	0.2	-0.1	0.2	252	3.9	3.7	1.2	273	14.0	14.0	-0.8	266	24.7	24.6	1.7	258	36.4	35.6	7.7	249	21.9	20.5	7.8			
30	319	1.8	1.2	-1.4	360	0.7	0.0	-0.7	270	3.8	3.8	0.0	274	14.4	14.4	-0.9	264	29.7	29.5	3.1	260	37.5	37.0	6.4	226	31.4	22.4	22.0			
31	13	0.9	-0.2	-0.9	121	0.6	-0.5	0.3	265	3.7	3.7	0.3	269	15.0	15.0	0.3	262	31.1	30.8	4.4	262	41.2	40.8	5.8	243	27.1	24.1	12.3			

Daily Normals of Upper Air Winds (1971-2000)

BANGLORE

JANUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	—	—	—	—	85	4.7	-4.7	-0.4	70	4.0	-3.8	-1.4	69	1.4	-1.3	-0.5	252	4.6	4.4	1.4	231	9.6	7.4	6.1	130	10.4	-7.9	6.7			
2	—	—	—	—	89	4.2	-4.2	-0.1	80	2.3	-2.3	-0.4	27	1.3	-0.6	-1.2	242	5.3	4.7	2.5	214	9.0	5.0	7.5	153	4.0	-1.8	3.6			
3	—	—	—	—	80	4.1	-4.0	-0.7	83	2.4	-2.4	-0.3	67	1.3	-1.2	-0.5	229	5.7	4.3	3.7	224	10.0	7.0	7.2	307	7.4	5.9	-4.4			
4	—	—	—	—	87	4.5	-4.5	-0.2	86	1.4	-1.4	-0.1	81	1.2	-1.2	-0.2	231	7.5	5.8	4.7	233	7.7	6.2	4.6	111	1.9	-1.8	0.7			
5	—	—	—	—	85	4.2	-4.2	-0.4	58	3.1	-2.6	-1.6	145	1.2	-0.7	1.0	284	5.5	5.3	-1.3	250	9.2	8.7	3.1	298	2.6	2.3	-1.2			
6	—	—	—	—	74	4.5	-4.3	-1.2	69	1.9	-1.8	-0.7	143	0.5	-0.3	0.4	214	5.2	2.9	4.3	260	6.6	6.5	1.1	255	4.1	4.0	1.1			
7	—	—	—	—	96	3.9	-3.9	0.4	56	1.1	-0.9	-0.6	333	0.4	0.2	-0.4	240	8.7	7.6	4.3	263	5.8	5.8	0.7	242	2.7	2.4	1.3			
8	—	—	—	—	90	3.7	-3.7	0.0	96	1.8	-1.8	0.2	264	0.9	0.9	0.1	286	7.1	6.8	-1.9	236	10.5	8.7	5.9	328	1.3	0.7	-1.1			
9	—	—	—	—	100	4.6	-4.5	0.8	96	1.8	-1.8	0.2	277	1.6	1.6	-0.2	254	7.1	6.8	1.9	241	8.7	7.6	4.2	301	2.6	2.2	-1.3			
10	—	—	—	—	90	4.2	-4.2	0.0	108	0.6	-0.6	0.2	212	2.2	1.2	1.9	249	9.8	9.2	3.5	233	9.5	7.6	5.7	211	4.8	2.5	4.1			
11	—	—	—	—	105	3.5	-3.4	0.9	31	1.2	-0.6	-1.0	297	4.4	3.9	-2.0	248	9.9	9.2	3.7	239	12.5	10.7	6.5	263	5.0	5.0	0.6			
12	—	—	—	—	82	3.6	-3.6	-0.5	18	1.3	-0.4	-1.2	332	2.4	1.1	-2.1	256	9.0	8.7	2.2	224	9.0	6.2	6.5	196	3.6	1.0	3.5			
13	—	—	—	—	93	4.5	-4.5	0.2	49	2.3	-1.7	-1.5	360	1.4	0.0	-1.4	269	12.2	12.2	0.2	237	11.7	9.8	6.3	146	3.4	-1.9	2.8			
14	—	—	—	—	96	4.6	-4.6	0.5	68	0.5	-0.5	-0.2	309	2.1	1.6	-1.3	256	7.9	7.7	1.9	232	9.5	7.5	5.8	279	3.8	3.8	-0.6			
15	—	—	—	—	93	4.0	-4.0	0.2	56	1.1	-0.9	-0.6	303	1.7	1.4	-0.9	277	9.4	9.3	-1.2	238	10.5	8.9	5.6	52	2.8	-2.2	-1.7			
16	—	—	—	—	95	4.9	-4.9	0.4	52	1.8	-1.4	-1.1	180	0.8	0.0	0.8	251	8.7	8.2	2.9	212	12.1	6.4	10.3	96	7.8	-7.8	0.8			
17	—	—	—	—	96	4.4	-4.4	0.5	74	1.9	-1.8	-0.5	305	2.8	2.3	-1.6	257	5.7	5.6	1.3	224	11.2	7.8	8.0	146	1.1	-0.6	0.9			
18	—	—	—	—	86	4.4	-4.4	-0.3	16	2.5	-0.7	-2.4	326	0.4	0.2	-0.3	245	4.7	4.3	2.0	227	7.6	5.5	5.2	221	3.2	2.1	2.4			
19	—	—	—	—	95	3.7	-3.7	0.3	41	1.8	-1.2	-1.4	18	0.6	-0.2	-0.6	254	6.0	5.8	1.7	215	10.2	5.9	8.3	90	6.3	-6.3	0.0			
20	—	—	—	—	88	3.2	-3.2	-0.1	29	1.0	-0.5	-0.9	360	0.9	0.0	-0.9	241	7.0	6.1	3.4	237	10.5	8.8	5.8	158	4.8	-1.8	4.5			
21	—	—	—	—	81	4.4	-4.3	-0.7	60	2.2	-1.9	-1.1	360	1.7	0.0	-1.7	244	6.2	5.6	2.7	219	11.9	7.4	9.3	173	5.6	-0.7	5.6			
22	—	—	—	—	86	4.5	-4.5	-0.3	48	3.1	-2.3	-2.1	351	2.4	0.4	-2.4	249	4.3	4.0	1.5	213	8.2	4.5	6.9	198	2.3	0.7	2.2			
23	—	—	—	—	81	5.3	-5.2	-0.8	57	4.5	-3.8	-2.5	339	1.7	0.6	-1.6	257	6.6	6.4	1.5	208	6.7	3.1	5.9	243	1.8	1.6	0.8			
24	—	—	—	—	93	5.5	-5.5	0.3	71	3.7	-3.5	-1.2	246	1.2	1.1	0.5	268	5.7	5.7	0.2	234	9.5	7.7	5.5	173	3.2	-0.4	3.2			
25	—	—	—	—	80	4.8	-4.7	-0.8	38	3.3	-2.0	-2.6	11	0.5	-0.1	-0.5	263	5.1	5.1	0.6	193	6.2	1.4	6.0	126	7.2	-5.8	4.2			
26	—	—	—	—	88	4.6	-4.6	-0.2	39	2.2	-1.4	-1.7	295	1.4	1.3	-0.6	270	5.6	5.6	0.0	227	10.0	7.3	6.9	242	6.8	6.0	3.2			
27	—	—	—	—	92	5.1	-5.1	0.2	57	2.7	-2.3	-1.5	329	3.3	1.7	-2.8	258	6.6	6.4	1.4	225	7.9	5.6	5.6	270	3.0	3.0	0.0			
28	—	—	—	—	80	4.6	-4.5	-0.8	68	3.7	-3.4	-1.4	338	2.9	1.1	-2.7	267	5.7	5.7	0.3	226	7.8	5.6	5.4	59	1.2	-1.0	-0.6			
29	—	—	—	—	80	5.2	-5.1	-0.9	57	4.6	-3.9	-2.5	21	5.1	-1.8	-4.8	296	5.5	4.9	-2.4	237	8.8	7.4	4.8	121	2.7	-2.3	1.4			
30	—	—	—	—	84	4.7	-4.7	-0.5	64	4.6	-4.1	-2.0	25	3.5	-1.5	-3.2	263	6.6	6.6	0.8	241	10.5	9.2	5.0	207	0.7	0.3	0.6			
31	—	—	—	—	78	5.2	-5.1	-1.1	70	4.7	-4.4	-1.6	7	1.6	-0.2	-1.6	258	6.1	6.0	1.3	246	5.2	4.8	2.1	227	2.2	1.6	1.5			

Daily Normals of Upper Air Winds (1971-2000)

50

BANGLORE

FEBRUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	—	—	—	—	81	4.6	-4.5	-0.7	67	2.8	-2.6	-1.1	354	3.0	0.3	-3.0	268	6.5	6.5	0.2	242	8.3	7.3	3.9	259	4.1	4.0	0.8			
2	—	—	—	—	91	4.5	-4.5	0.1	75	2.3	-2.2	-0.6	288	2.2	2.1	-0.7	282	9.1	8.9	-1.9	244	10.1	9.1	4.4	246	4.8	4.4	2.0			
3	—	—	—	—	82	3.7	-3.7	-0.5	75	2.0	-1.9	-0.5	288	2.6	2.5	-0.8	262	10.1	10.0	1.4	236	11.4	9.4	6.4	268	5.5	5.5	0.2			
4	—	—	—	—	93	3.7	-3.7	0.2	86	1.3	-1.3	-0.1	298	3.0	2.6	-1.4	283	9.6	9.3	-2.2	254	5.1	4.9	1.4	90	2.6	-2.6	0.0			
5	—	—	—	—	92	3.6	-3.6	0.1	20	1.5	-0.5	-1.4	276	3.6	3.6	-0.4	272	9.4	9.4	-0.4	255	11.5	11.1	3.0	267	3.3	3.3	0.2			
6	—	—	—	—	88	3.6	-3.6	-0.1	28	1.5	-0.7	-1.3	305	3.9	3.2	-2.2	259	10.4	10.2	1.9	252	10.3	9.8	3.1	249	2.8	2.6	1.0			
7	—	—	—	—	103	3.5	-3.4	0.8	36	1.7	-1.0	-1.4	321	3.6	2.3	-2.8	275	10.0	10.0	-0.9	270	12.6	12.6	0.0	193	1.7	0.4	1.7			
8	—	—	—	—	108	3.3	-3.1	1.0	337	1.5	0.6	-1.4	306	4.8	3.9	-2.8	251	14.1	13.4	4.5	247	9.9	9.1	3.8	312	5.4	4.0	-3.6			
9	—	—	—	—	79	3.3	-3.2	-0.6	360	1.4	0.0	-1.4	309	4.1	3.2	-2.6	267	10.0	10.0	0.6	256	11.9	11.6	2.8	300	7.0	6.1	-3.5			
10	—	—	—	—	103	3.2	-3.1	0.7	5	2.2	-0.2	-2.2	312	4.8	3.6	-3.2	274	10.0	10.0	-0.7	250	10.8	10.1	3.7	225	0.3	0.2	0.2			
11	—	—	—	—	80	4.2	-4.1	-0.7	29	2.5	-1.2	-2.2	357	2.0	0.1	-2.0	282	8.8	8.6	-1.9	245	11.2	10.2	4.7	342	0.6	0.2	-0.6			
12	—	—	—	—	89	5.1	-5.1	-0.1	60	2.2	-1.9	-1.1	3	2.2	-0.1	-2.2	272	9.3	9.3	-0.4	227	9.2	6.7	6.3	228	3.0	2.2	2.0			
13	—	—	—	—	100	4.2	-4.1	0.7	49	2.0	-1.5	-1.3	228	1.3	1.0	0.9	266	9.8	9.8	0.6	239	12.1	10.3	6.3	294	2.7	2.5	-1.1			
14	—	—	—	—	96	3.6	-3.6	0.4	98	0.7	-0.7	0.1	245	1.4	1.3	0.6	263	8.7	8.6	1.0	230	11.6	8.9	7.5	97	1.6	-1.6	0.2			
15	—	—	—	—	90	2.8	-2.8	0.0	315	0.1	0.1	-0.1	293	4.4	4.1	-1.7	277	9.0	8.9	-1.1	235	6.4	5.2	3.7	360	0.2	0.0	-0.2			
16	—	—	—	—	92	3.7	-3.7	0.1	32	2.2	-1.2	-1.9	295	2.6	2.4	-1.1	256	5.3	5.1	1.3	219	7.8	4.9	6.1	143	2.0	-1.2	1.6			
17	—	—	—	—	96	2.9	-2.9	0.3	29	1.0	-0.5	-0.9	298	5.1	4.5	-2.4	248	6.1	5.7	2.3	216	8.7	5.1	7.0	210	2.4	1.2	2.1			
18	—	—	—	—	107	2.8	-2.7	0.8	27	0.9	-0.4	-0.8	329	3.3	1.7	-2.8	266	5.1	5.1	0.4	227	7.6	5.6	5.2	141	2.7	-1.7	2.1			
19	—	—	—	—	96	2.9	-2.9	0.3	75	1.6	-1.5	-0.4	335	4.5	1.9	-4.1	274	4.4	4.4	-0.3	234	6.1	4.9	3.6	130	0.8	-0.6	0.5			
20	—	—	—	—	96	4.1	-4.1	0.4	72	2.0	-1.9	-0.6	343	1.7	0.5	-1.6	283	3.2	3.1	-0.7	231	4.4	3.4	2.8	76	0.8	-0.8	-0.2			
21	—	—	—	—	90	1.9	-1.9	0.0	11	1.6	-0.3	-1.6	324	2.2	1.3	-1.8	255	5.2	5.0	1.3	238	7.7	6.5	4.1	270	2.9	2.9	0.0			
22	—	—	—	—	83	3.2	-3.2	-0.4	27	1.8	-0.8	-1.6	326	3.7	2.1	-3.1	257	6.4	6.2	1.4	226	5.9	4.2	4.1	77	4.1	-4.0	-0.9			
23	—	—	—	—	86	4.1	-4.1	-0.3	69	2.2	-2.1	-0.8	279	2.4	2.4	-0.4	274	6.1	6.1	-0.4	257	6.6	6.4	1.5	53	2.6	-2.1	-1.6			
24	—	—	—	—	86	4.0	-4.0	-0.3	49	2.8	-2.1	-1.8	311	1.8	1.4	-1.2	236	6.5	5.4	3.7	233	7.6	6.1	4.6	109	2.4	-2.3	0.8			
25	—	—	—	—	95	3.5	-3.5	0.3	48	2.7	-2.0	-1.8	317	2.1	1.4	-1.5	254	9.3	9.0	2.5	260	13.7	13.5	2.4	211	4.7	2.4	4.0			
26	—	—	—	—	85	3.8	-3.8	-0.3	50	3.0	-2.3	-1.9	313	1.8	1.3	-1.2	252	8.5	8.1	2.6	255	8.6	8.3	2.3	35	3.2	-1.8	-2.6			
27	—	—	—	—	87	4.0	-4.0	-0.2	68	2.7	-2.5	-1.0	253	2.7	2.6	0.8	266	11.5	11.5	0.8	264	7.2	7.2	0.7	92	6.9	-6.9	0.3			
28	—	—	—	—	90	4.8	-4.8	0.0	49	2.1	-1.6	-1.4	324	1.7	1.0	-1.4	269	7.4	7.4	0.1	246	7.3	6.7	3.0	105	6.1	-5.9	1.6			
29	—	—	—	—	92	5.0	-5.0	0.2	90	5.7	-5.7	0.0	9	2.0	-0.3	-2.0	233	6.7	5.4	4.0	186	7.5	0.8	7.5	119	9.5	-8.3	4.6			

Daily Normals of Upper Air Winds (1971-2000)

51

BANGLORE

MARCH

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	—	—	—	—	92	5.3	-5.3	0.2	76	3.6	-3.5	-0.9	337	2.1	0.8	-1.9	271	7.6	7.6	-0.1	246	7.0	6.4	2.8	94	5.9	-5.9	0.4			
2	—	—	—	—	90	5.2	-5.2	0.0	72	2.9	-2.8	-0.9	306	1.9	1.5	-1.1	269	9.4	9.4	0.1	243	11.1	9.9	5.0	94	5.1	-5.1	0.4			
3	—	—	—	—	101	6.2	-6.1	1.2	60	3.8	-3.3	-1.9	347	4.0	0.9	-3.9	293	7.2	6.6	-2.8	249	7.3	6.8	2.6	140	4.0	-2.6	3.1			
4	—	—	—	—	85	4.4	-4.4	-0.4	73	3.7	-3.5	-1.1	17	2.8	-0.8	-2.7	266	7.9	7.9	0.6	245	11.3	10.2	4.8	205	1.7	0.7	1.5			
5	—	—	—	—	94	3.9	-3.9	0.3	71	2.1	-2.0	-0.7	356	2.6	0.2	-2.6	262	4.9	4.9	0.7	260	7.2	7.1	1.2	189	1.3	0.2	1.3			
6	—	—	—	—	92	3.6	-3.6	0.1	75	3.1	-3.0	-0.8	8	1.5	-0.2	-1.5	263	7.1	7.0	0.9	249	8.1	7.6	2.9	31	2.7	-1.4	-2.3			
7	—	—	—	—	87	4.2	-4.2	-0.2	76	3.3	-3.2	-0.8	45	3.1	-2.2	-2.2	270	5.8	5.8	0.0	255	10.7	10.3	2.8	54	2.6	-2.1	-1.5			
8	—	—	—	—	89	4.4	-4.4	-0.1	77	2.7	-2.6	-0.6	347	1.3	0.3	-1.3	265	8.1	8.1	0.7	257	7.7	7.5	1.7	108	0.6	-0.6	0.2			
9	—	—	—	—	81	5.1	-5.0	-0.8	73	4.1	-3.9	-1.2	343	1.7	0.5	-1.6	261	11.2	11.1	1.8	246	10.7	9.7	4.4	180	0.6	0.0	0.6			
10	—	—	—	—	96	5.4	-5.4	0.6	79	4.1	-4.0	-0.8	90	0.9	-0.9	0.0	254	8.2	7.9	2.2	263	11.1	11.0	1.4	234	3.6	2.9	2.1			
11	—	—	—	—	90	4.3	-4.3	0.0	63	3.3	-2.9	-1.5	294	2.2	2.0	-0.9	276	8.4	8.4	-0.9	251	11.8	11.2	3.8	237	1.7	1.4	0.9			
12	—	—	—	—	85	3.2	-3.2	-0.3	50	3.3	-2.5	-2.1	318	3.1	2.1	-2.3	255	7.7	7.4	2.0	267	6.6	6.6	0.4	274	1.3	1.3	-0.1			
13	—	—	—	—	99	4.3	-4.2	0.7	61	3.3	-2.9	-1.6	356	1.3	0.1	-1.3	279	7.3	7.2	-1.2	257	5.7	5.6	1.3	106	5.4	-5.2	1.5			
14	—	—	—	—	98	5.5	-5.4	0.8	67	3.4	-3.1	-1.3	358	2.4	0.1	-2.4	273	8.3	8.3	-0.4	260	12.7	12.5	2.1	8	3.5	-0.5	-3.5			
15	—	—	—	—	90	4.3	-4.3	0.0	73	3.9	-3.7	-1.1	30	2.2	-1.1	-1.9	276	4.9	4.9	-0.5	261	7.9	7.8	1.2	103	1.8	-1.8	0.4			
16	—	—	—	—	89	4.9	-4.9	-0.1	68	4.5	-4.2	-1.7	43	1.9	-1.3	-1.4	249	7.9	7.4	2.9	236	12.0	9.9	6.8	63	1.1	-1.0	-0.5			
17	—	—	—	—	92	4.8	-4.8	0.2	74	4.0	-3.8	-1.1	62	1.9	-1.7	-0.9	253	8.0	7.7	2.3	224	9.9	6.9	7.1	130	4.8	-3.7	3.1			
18	—	—	—	—	96	4.8	-4.8	0.5	72	4.7	-4.5	-1.5	342	0.6	0.2	-0.6	255	9.0	8.7	2.4	246	14.4	13.1	5.9	252	1.3	1.2	0.4			
19	—	—	—	—	86	4.4	-4.4	-0.3	68	3.8	-3.5	-1.4	15	2.4	-0.6	-2.3	254	7.4	7.1	2.0	262	10.5	10.4	1.4	128	2.9	-2.3	1.8			
20	—	—	—	—	90	4.0	-4.0	0.0	44	3.9	-2.7	-2.8	43	2.2	-1.5	-1.6	252	10.3	9.8	3.2	250	12.5	11.8	4.2	300	2.4	2.1	-1.2			
21	—	—	—	—	90	4.3	-4.3	0.0	57	3.8	-3.2	-2.1	29	2.5	-1.2	-2.2	273	9.3	9.3	-0.5	253	11.0	10.5	3.2	45	0.1	-0.1	-0.1			
22	—	—	—	—	89	4.5	-4.5	-0.1	52	4.9	-3.9	-3.0	8	2.8	-0.4	-2.8	263	8.9	8.8	1.1	251	13.6	12.8	4.5	269	4.6	4.6	0.1			
23	—	—	—	—	96	4.8	-4.8	0.5	68	4.8	-4.4	-1.8	360	3.4	0.0	-3.4	263	8.2	8.1	1.0	232	8.6	6.8	5.3	146	3.4	-1.9	2.8			
24	—	—	—	—	99	3.2	-3.2	0.5	67	4.3	-4.0	-1.7	9	1.8	-0.3	-1.8	257	10.3	10.0	2.3	252	10.3	9.8	3.2	129	2.1	-1.6	1.3			
25	—	—	—	—	94	4.5	-4.5	0.3	63	3.7	-3.3	-1.7	347	0.9	0.2	-0.9	257	13.1	12.8	2.9	250	11.6	10.9	3.9	284	0.4	0.4	-0.1			
26	—	—	—	—	93	4.1	-4.1	0.2	50	3.0	-2.3	-1.9	17	1.4	-0.4	-1.3	281	9.3	9.1	-1.8	245	10.8	9.8	4.6	127	2.1	-1.7	1.3			
27	—	—	—	—	84	4.0	-4.0	-0.4	57	4.6	-3.9	-2.5	53	4.0	-3.2	-2.4	276	8.3	8.3	-0.9	251	8.3	7.8	2.7	93	6.3	-6.3	0.3			
28	—	—	—	—	85	4.9	-4.9	-0.4	64	5.2	-4.7	-2.3	34	1.8	-1.0	-1.5	280	7.9	7.8	-1.4	241	7.9	6.9	3.8	133	4.4	-3.2	3.0			
29	—	—	—	—	91	4.5	-4.5	0.1	76	4.2	-4.1	-1.0	52	4.8	-3.8	-3.0	274	4.8	4.8	-0.3	239	8.5	7.3	4.4	108	6.4	-6.1	2.0			
30	—	—	—	—	87	5.0	-5.0	-0.3	72	4.7	-4.5	-1.5	61	3.5	-3.1	-1.7	273	5.1	5.1	-0.3	249	8.5	7.9	3.1	167	1.7	-0.4	1.7			
31	—	—	—	—	83	4.0	-4.0	-0.5	67	5.3	-4.9	-2.1	58	2.8	-2.4	-1.5	239	6.9	5.9	3.5	242	8.5	7.5	4.0	302	1.9	1.6	-1.0			

Daily Normals of Upper Air Winds (1971-2000)

BANGLORE

APRIL

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	—	—	—	—	85	3.3	-3.3	-0.3	66	4.8	-4.4	-2.0	90	2.3	-2.3	0.0	253	6.7	6.4	2.0	238	11.4	9.7	6.0	158	1.6	-0.6	1.5
2	—	—	—	—	100	4.2	-4.1	0.7	67	4.4	-4.1	-1.7	93	1.9	-1.9	0.1	247	5.6	5.2	2.2	225	6.6	4.7	4.7	61	2.5	-2.2	-1.2
3	—	—	—	—	90	4.1	-4.1	0.0	65	3.5	-3.2	-1.5	82	0.7	-0.7	-0.1	253	6.7	6.4	1.9	237	8.3	7.0	4.5	113	4.6	-4.2	1.8
4	—	—	—	—	74	3.6	-3.5	-1.0	55	2.9	-2.4	-1.7	294	1.0	0.9	-0.4	266	7.1	7.1	0.5	248	6.4	5.9	2.4	72	1.6	-1.5	-0.5
5	—	—	—	—	88	3.8	-3.8	-0.1	57	3.8	-3.2	-2.1	297	0.9	0.8	-0.4	271	8.4	8.4	-0.2	237	10.3	8.7	5.6	95	1.2	-1.2	0.1
6	—	—	—	—	92	5.7	-5.7	0.2	53	4.5	-3.6	-2.7	360	0.8	0.0	-0.8	257	6.5	6.3	1.4	226	5.5	4.0	3.8	141	5.8	-3.6	4.5
7	—	—	—	—	94	4.1	-4.1	0.3	65	4.7	-4.3	-2.0	65	2.3	-2.1	-1.0	275	2.4	2.4	-0.2	235	7.9	6.5	4.5	150	7.3	-3.7	6.3
8	—	—	—	—	93	3.5	-3.5	0.2	58	4.0	-3.4	-2.1	75	1.6	-1.5	-0.4	261	3.9	3.9	0.6	239	6.5	5.6	3.3	162	4.0	-1.2	3.8
9	—	—	—	—	74	3.5	-3.4	-1.0	56	3.6	-3.0	-2.0	56	1.4	-1.2	-0.8	252	6.2	5.9	1.9	253	7.9	7.6	2.3	347	2.6	0.6	-2.5
10	—	—	—	—	80	3.5	-3.4	-0.6	59	4.4	-3.8	-2.3	38	1.8	-1.1	-1.4	270	6.2	6.2	0.0	243	10.9	9.7	4.9	99	1.3	-1.3	0.2
11	—	—	—	—	96	3.1	-3.1	0.3	46	3.6	-2.6	-2.5	34	4.0	-2.2	-3.3	286	4.4	4.2	-1.2	239	6.3	5.4	3.2	116	6.6	-5.9	2.9
12	—	—	—	—	83	2.4	-2.4	-0.3	60	4.3	-3.7	-2.1	57	4.5	-3.8	-2.5	236	3.2	2.7	1.8	243	4.9	4.4	2.2	162	1.9	-0.6	1.8
13	—	—	—	—	88	3.6	-3.6	-0.1	46	4.0	-2.9	-2.8	24	2.2	-0.9	-2.0	231	5.4	4.2	3.4	232	6.7	5.3	4.1	147	4.8	-2.6	4.0
14	—	—	—	—	81	3.7	-3.7	-0.6	57	4.5	-3.8	-2.5	23	1.5	-0.6	-1.4	254	6.0	5.8	1.7	262	8.1	8.0	1.1	167	1.3	-0.3	1.3
15	—	—	—	—	95	2.4	-2.4	0.2	62	3.6	-3.2	-1.7	83	1.7	-1.7	-0.2	255	6.4	6.2	1.7	242	10.7	9.5	5.0	108	2.3	-2.2	0.7
16	—	—	—	—	80	3.4	-3.3	-0.6	59	4.8	-4.1	-2.5	71	2.4	-2.3	-0.8	251	6.0	5.7	2.0	237	7.4	6.2	4.1	96	4.9	-4.9	0.5
17	—	—	—	—	82	2.1	-2.1	-0.3	37	4.1	-2.5	-3.3	45	0.6	-0.4	-0.4	250	8.6	8.1	2.9	245	12.5	11.4	5.2	109	8.7	-8.2	2.8
18	—	—	—	—	82	4.4	-4.4	-0.6	47	4.9	-3.6	-3.3	29	1.3	-0.6	-1.1	250	8.5	8.0	2.9	224	11.7	8.1	8.5	104	5.9	-5.7	1.4
19	—	—	—	—	73	2.7	-2.6	-0.8	70	4.7	-4.4	-1.6	78	1.4	-1.4	-0.3	257	6.2	6.0	1.4	211	9.0	4.7	7.7	109	6.4	-6.0	2.1
20	—	—	—	—	85	3.3	-3.3	-0.3	64	4.9	-4.4	-2.1	94	1.6	-1.6	0.1	245	8.6	7.8	3.6	229	14.7	11.1	9.6	135	1.3	-0.9	0.9
21	—	—	—	—	78	2.5	-2.4	-0.5	57	5.4	-4.5	-2.9	69	1.9	-1.8	-0.7	254	5.1	4.9	1.4	227	8.5	6.2	5.8	123	4.4	-3.7	2.4
22	—	—	—	—	62	2.7	-2.4	-1.3	65	5.9	-5.3	-2.5	45	1.3	-0.9	-0.9	253	5.9	5.7	1.7	248	7.2	6.7	2.7	84	6.2	-6.2	-0.7
23	—	—	—	—	67	2.6	-2.4	-1.0	73	4.9	-4.7	-1.4	338	0.5	0.2	-0.5	256	6.3	6.1	1.5	243	8.7	7.8	3.9	92	5.1	-5.1	0.2
24	—	—	—	—	67	2.8	-2.6	-1.1	59	4.5	-3.9	-2.3	335	1.7	0.7	-1.5	284	8.1	7.9	-2.0	239	7.8	6.7	4.0	87	5.8	-5.8	-0.3
25	—	—	—	—	61	2.9	-2.5	-1.4	44	4.7	-3.3	-3.4	346	3.6	0.9	-3.5	279	5.2	5.1	-0.8	260	8.3	8.2	1.4	74	2.5	-2.4	-0.7
26	—	—	—	—	76	3.3	-3.2	-0.8	54	5.1	-4.1	-3.0	351	2.6	0.4	-2.6	288	7.0	6.6	-2.2	266	8.2	8.2	0.6	84	4.0	-4.0	-0.4
27	—	—	—	—	87	3.3	-3.3	-0.2	50	5.6	-4.3	-3.6	23	2.3	-0.9	-2.1	300	5.2	4.5	-2.6	237	8.5	7.1	4.6	79	5.2	-5.1	-1.0
28	—	—	—	—	49	2.3	-1.7	-1.5	41	4.0	-2.6	-3.0	41	2.9	-1.9	-2.2	277	4.6	4.6	-0.6	228	7.1	5.3	4.7	100	7.7	-7.6	1.4
29	—	—	—	—	58	1.9	-1.6	-1.0	49	4.6	-3.5	-3.0	23	3.4	-1.3	-3.1	304	5.0	4.1	-2.8	241	6.3	5.5	3.1	100	4.8	-4.7	0.8
30	—	—	—	—	13	1.8	-0.4	-1.8	37	4.5	-2.7	-3.6	20	5.0	-1.7	-4.7	280	2.2	2.2	-0.4	226	4.5	3.2	3.1	92	7.1	-7.1	0.2

Daily Normals of Upper Air Winds (1971-2000)

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BANGLORE

MAY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	—	—	—	—	24	2.2	-0.9	-2.0	37	3.9	-2.3	-3.1	22	4.1	-1.5	-3.8	260	5.8	5.7	1.0	216	4.6	2.7	3.7	102	4.5	-4.4	0.9			
2	—	—	—	—	39	2.1	-1.3	-1.6	47	4.5	-3.3	-3.1	24	3.0	-1.2	-2.7	262	2.7	2.7	0.4	193	4.8	1.1	4.7	99	13.5	-13.3	2.2			
3	—	—	—	—	35	2.1	-1.2	-1.7	30	4.0	-2.0	-3.5	32	1.3	-0.7	-1.1	248	3.5	3.2	1.3	230	3.5	2.7	2.3	112	8.8	-8.2	3.3			
4	—	—	—	—	41	2.1	-1.4	-1.6	58	5.7	-4.8	-3.0	45	0.8	-0.6	-0.6	336	1.2	0.5	-1.1	195	4.3	1.1	4.2	100	10.6	-10.4	1.8			
5	—	—	—	—	35	3.2	-1.8	-2.6	38	4.4	-2.7	-3.5	22	2.2	-0.8	-2.0	264	3.9	3.9	0.4	178	6.5	-0.2	6.5	97	7.8	-7.7	0.9			
6	—	—	—	—	31	3.5	-1.8	-3.0	56	4.7	-3.9	-2.6	40	1.6	-1.0	-1.2	276	2.7	2.7	-0.3	204	3.7	1.5	3.4	118	5.5	-4.8	2.6			
7	—	—	—	—	360	1.0	0.0	-1.0	47	4.5	-3.3	-3.1	40	3.5	-2.3	-2.7	122	1.3	-1.1	0.7	135	3.7	-2.6	2.6	92	9.8	-9.8	0.4			
8	—	—	—	—	343	2.1	0.6	-2.0	37	4.4	-2.6	-3.5	50	2.5	-1.9	-1.6	248	1.1	1.0	0.4	195	2.3	0.6	2.2	98	11.4	-11.3	1.5			
9	—	—	—	—	332	2.6	1.2	-2.3	27	3.8	-1.7	-3.4	27	1.6	-0.7	-1.4	344	1.8	0.5	-1.7	153	3.6	-1.6	3.2	114	10.3	-9.4	4.1			
10	—	—	—	—	267	1.8	1.8	0.1	20	4.0	-1.4	-3.8	38	2.4	-1.5	-1.9	207	1.3	0.6	1.2	187	1.6	0.2	1.6	85	11.7	-11.7	-1.0			
11	—	—	—	—	28	1.5	-0.7	-1.3	26	3.7	-1.6	-3.3	19	2.4	-0.8	-2.3	259	0.5	0.5	0.1	180	4.2	0.0	4.2	106	10.8	-10.4	2.9			
12	—	—	—	—	12	1.4	-0.3	-1.4	51	5.3	-4.1	-3.3	76	3.0	-2.9	-0.7	193	3.7	0.8	3.6	147	6.7	-3.6	5.6	95	14.8	-14.7	1.4			
13	—	—	—	—	339	1.7	0.6	-1.6	30	3.4	-1.7	-3.0	51	2.1	-1.6	-1.3	228	3.1	2.3	2.1	141	3.5	-2.2	2.7	104	9.3	-9.0	2.2			
14	—	—	—	—	360	1.2	0.0	-1.2	45	4.0	-2.8	-2.8	48	1.3	-1.0	-0.9	207	3.3	1.5	2.9	135	4.4	-3.1	3.1	102	14.9	-14.6	3.2			
15	—	—	—	—	331	1.3	0.6	-1.1	29	2.6	-1.3	-2.3	108	1.9	-1.8	0.6	119	2.1	-1.8	1.0	141	4.4	-2.8	3.4	105	12.1	-11.7	3.1			
16	—	—	—	—	283	1.7	1.7	-0.4	31	2.7	-1.4	-2.3	66	1.0	-0.9	-0.4	201	0.9	0.3	0.8	134	4.0	-2.9	2.8	102	14.5	-14.2	2.9			
17	—	—	—	—	299	2.6	2.3	-1.3	16	4.0	-1.1	-3.8	41	3.0	-2.0	-2.3	84	2.0	-2.0	-0.2	125	3.8	-3.1	2.2	94	13.5	-13.5	1.0			
18	—	—	—	—	305	3.2	2.6	-1.8	4	3.0	-0.2	-3.0	18	2.3	-0.7	-2.2	90	0.6	-0.6	0.0	115	5.0	-4.5	2.1	102	10.2	-10.0	2.2			
19	—	—	—	—	301	3.1	2.7	-1.6	7	4.3	-0.5	-4.3	22	4.1	-1.5	-3.8	243	0.9	0.8	0.4	145	4.2	-2.4	3.4	90	12.1	-12.1	0.1			
20	—	—	—	—	318	3.1	2.1	-2.3	6	4.1	-0.4	-4.1	11	3.7	-0.7	-3.6	105	2.0	-1.9	0.5	123	7.5	-6.3	4.1	89	12.1	-12.1	-0.3			
21	—	—	—	—	305	2.9	2.4	-1.7	31	2.6	-1.3	-2.2	29	2.1	-1.0	-1.8	96	1.0	-1.0	0.1	116	6.6	-5.9	2.9	85	14.7	-14.6	-1.3			
22	—	—	—	—	315	2.4	1.7	-1.7	18	3.3	-1.0	-3.1	342	1.9	0.6	-1.8	105	1.1	-1.1	0.3	136	7.0	-4.9	5.0	95	14.2	-14.1	1.3			
23	—	—	—	—	300	2.2	1.9	-1.1	14	3.6	-0.9	-3.5	13	2.3	-0.5	-2.2	42	1.5	-1.0	-1.1	119	6.0	-5.2	2.9	90	14.1	-14.1	0.1			
24	—	—	—	—	299	4.3	3.8	-2.1	358	3.3	0.1	-3.3	13	3.6	-0.8	-3.5	45	0.6	-0.4	-0.4	129	6.3	-4.9	4.0	91	19.0	-19.0	0.4			
25	—	—	—	—	294	3.4	3.1	-1.4	14	2.9	-0.7	-2.8	24	1.7	-0.7	-1.6	106	1.8	-1.7	0.5	117	8.3	-7.4	3.8	96	17.5	-17.4	1.7			
26	—	—	—	—	313	2.1	1.5	-1.4	20	3.8	-1.3	-3.6	46	2.8	-2.0	-1.9	125	1.6	-1.3	0.9	101	7.1	-7.0	1.4	103	18.4	-18.0	4.0			
27	—	—	—	—	295	2.9	2.6	-1.2	7	2.6	-0.3	-2.6	62	1.7	-1.5	-0.8	100	3.6	-3.5	0.6	107	7.2	-6.9	2.1	99	18.4	-18.2	3.0			
28	—	—	—	—	288	3.6	3.4	-1.1	350	3.6	0.6	-3.5	27	2.9	-1.3	-2.6	101	2.1	-2.1	0.4	106	8.1	-7.8	2.2	96	18.1	-18.0	1.8			
29	—	—	—	—	291	4.0	3.7	-1.4	6	1.9	-0.2	-1.9	19	2.1	-0.7	-2.0	144	2.2	-1.3	1.8	117	9.1	-8.1	4.1	101	18.2	-17.8	3.6			
30	—	—	—	—	277	3.9	3.9	-0.5	14	2.1	-0.5	-2.0	52	3.4	-2.7	-2.1	100	3.4	-3.3	0.6	98	5.5	-5.4	0.8	97	17.4	-17.3	2.0			
31	—	—	—	—	277	3.8	3.8	-0.5	342	2.0	0.6	-1.9	56	3.2	-2.7	-1.8	82	4.4	-4.4	-0.6	100	9.0	-8.9	1.6	99	18.8	-18.6	2.9			

Daily Normals of Upper Air Winds (1971-2000)

BANGLORE

JUNE

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	—	—	—	—	276	4.6	4.6	-0.5	356	3.0	0.2	-3.0	350	1.1	0.2	-1.1	108	2.0	-1.9	0.6	106	10.2	-9.8	2.9	103	16.5	-16.1	3.7			
2	—	—	—	—	264	3.6	3.6	0.4	317	2.5	1.7	-1.8	360	0.8	0.0	-0.8	81	2.0	-2.0	-0.3	99	10.7	-10.6	1.7	101	25.5	-25.0	5.0			
3	—	—	—	—	273	6.0	6.0	-0.3	281	3.2	3.1	-0.6	243	1.8	1.6	0.8	104	1.2	-1.2	0.3	102	9.3	-9.1	1.9	104	17.9	-17.4	4.3			
4	—	—	—	—	270	6.1	6.1	0.0	265	2.1	2.1	0.2	207	2.0	0.9	1.8	85	2.4	-2.4	-0.2	88	7.1	-7.1	-0.2	98	18.9	-18.7	2.6			
5	—	—	—	—	262	7.1	7.0	1.0	262	4.9	4.8	0.7	187	2.5	0.3	2.5	80	2.3	-2.3	-0.4	82	7.5	-7.4	-1.1	102	23.0	-22.5	4.7			
6	—	—	—	—	267	6.6	6.6	0.4	268	3.6	3.6	0.1	158	0.5	-0.2	0.5	53	3.5	-2.8	-2.1	93	11.3	-11.3	0.5	97	23.3	-23.1	2.9			
7	—	—	—	—	262	8.9	8.8	1.2	270	4.8	4.8	0.0	292	1.1	1.0	-0.4	93	3.8	-3.8	0.2	90	12.2	-12.2	-0.1	96	23.7	-23.6	2.4			
8	—	—	—	—	262	7.6	7.5	1.1	283	5.2	5.1	-1.2	285	2.4	2.3	-0.6	84	4.5	-4.5	-0.5	87	14.1	-14.1	-0.8	100	24.3	-23.9	4.2			
9	—	—	—	—	266	8.1	8.1	0.5	282	5.1	5.0	-1.1	319	2.3	1.5	-1.7	59	5.1	-4.4	-2.6	88	13.9	-13.9	-0.6	100	21.3	-21.0	3.7			
10	—	—	—	—	271	7.7	7.7	-0.2	277	7.0	6.9	-0.9	280	3.5	3.4	-0.6	58	4.6	-3.9	-2.4	92	14.6	-14.6	0.6	89	28.7	-28.7	-0.5			
11	—	—	—	—	271	8.2	8.2	-0.1	289	7.8	7.4	-2.6	285	2.3	2.2	-0.6	98	2.8	-2.8	0.4	86	14.5	-14.5	-1.1	90	29.0	-29.0	0.1			
12	—	—	—	—	270	9.0	9.0	0.0	288	7.6	7.2	-2.4	287	2.7	2.6	-0.8	70	4.9	-4.6	-1.7	92	18.9	-18.9	0.8	91	28.3	-28.3	0.3			
13	—	—	—	—	281	8.0	7.9	-1.5	289	8.5	8.0	-2.8	283	5.0	4.9	-1.1	99	5.9	-5.8	0.9	89	17.2	-17.2	-0.4	92	30.0	-30.0	1.2			
14	—	—	—	—	268	9.7	9.7	0.4	278	9.0	8.9	-1.2	282	4.9	4.8	-1.0	96	6.0	-6.0	0.6	87	19.5	-19.5	-1.1	93	31.4	-31.3	1.9			
15	—	—	—	—	259	10.9	10.7	2.0	272	10.3	10.3	-0.4	269	6.0	6.0	0.1	77	2.8	-2.7	-0.6	85	14.4	-14.4	-1.2	97	30.4	-30.2	3.7			
16	—	—	—	—	263	10.2	10.1	1.3	278	11.5	11.4	-1.6	265	7.6	7.6	0.6	88	3.2	-3.2	-0.1	88	17.9	-17.9	-0.7	93	29.7	-29.7	1.5			
17	—	—	—	—	266	11.2	11.2	0.8	278	12.4	12.3	-1.8	267	6.8	6.8	0.4	77	4.5	-4.4	-1.0	88	19.5	-19.5	-0.7	91	26.2	-26.2	0.6			
18	—	—	—	—	261	11.1	11.0	1.7	274	12.0	12.0	-0.8	268	8.8	8.8	0.3	89	5.9	-5.9	-0.1	84	19.5	-19.4	-1.9	92	30.1	-30.1	1.1			
19	—	—	—	—	260	10.6	10.4	1.8	273	13.4	13.4	-0.7	278	7.5	7.4	-1.1	92	5.3	-5.3	0.2	90	18.7	-18.7	0.1	94	28.4	-28.3	1.9			
20	—	—	—	—	268	11.2	11.2	0.3	284	11.6	11.3	-2.8	270	7.2	7.2	0.0	74	5.7	-5.5	-1.6	92	20.6	-20.6	0.6	90	34.9	-34.9	-0.2			
21	—	—	—	—	264	9.3	9.2	1.0	285	9.9	9.6	-2.5	278	6.8	6.7	-1.0	73	5.1	-4.9	-1.5	83	19.5	-19.4	-2.4	93	33.5	-33.5	1.6			
22	—	—	—	—	265	9.4	9.4	0.8	275	9.3	9.3	-0.8	275	5.4	5.4	-0.5	96	4.8	-4.8	0.5	88	21.2	-21.2	-0.7	83	32.6	-32.4	-3.9			
23	—	—	—	—	265	9.8	9.8	0.9	275	9.7	9.7	-0.9	273	4.5	4.5	-0.2	95	3.3	-3.3	0.3	91	21.6	-21.6	0.2	86	34.1	-34.0	-2.2			
24	—	—	—	—	267	8.9	8.9	0.5	273	11.2	11.2	-0.5	264	6.2	6.2	0.6	92	7.1	-7.1	0.2	91	23.4	-23.4	0.4	89	31.9	-31.9	-0.8			
25	—	—	—	—	264	9.3	9.2	1.0	279	9.4	9.3	-1.4	287	4.7	4.5	-1.4	78	5.6	-5.5	-1.2	82	20.4	-20.2	-2.8	98	31.7	-31.4	4.4			
26	—	—	—	—	263	10.5	10.4	1.3	278	9.5	9.4	-1.4	267	4.0	4.0	0.2	94	5.7	-5.7	0.4	84	19.7	-19.6	-2.1	96	35.1	-34.9	3.5			
27	—	—	—	—	260	10.3	10.1	1.8	280	11.1	10.9	-1.9	270	5.3	5.3	0.0	88	5.6	-5.6	-0.2	84	20.6	-20.5	-2.0	89	35.0	-35.0	-0.6			
28	—	—	—	—	263	11.5	11.4	1.4	280	10.5	10.3	-1.8	266	6.9	6.9	0.5	83	5.1	-5.1	-0.6	86	20.9	-20.8	-1.5	90	37.1	-37.1	0.1			
29	—	—	—	—	261	10.0	9.9	1.5	283	10.2	9.9	-2.3	272	5.3	5.3	-0.2	80	5.9	-5.8	-1.0	87	20.5	-20.5	-0.9	93	34.1	-34.0	2.0			
30	—	—	—	—	261	9.9	9.8	1.5	277	10.5	10.4	-1.3	277	4.0	4.0	-0.5	79	6.5	-6.4	-1.3	87	20.8	-20.8	-1.2	94	32.7	-32.6	2.1			

Daily Normals of Upper Air Winds (1971-2000)

55

BANGLORE

JULY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	—	—	—	—	263	10.0	9.9	1.3	278	10.1	10.0	-1.4	270	4.4	4.4	0.0	82	5.5	-5.4	-0.8	89	20.9	-20.9	-0.2	93	33.8	-33.8	1.6			
2	—	—	—	—	264	10.1	10.0	1.1	281	9.3	9.1	-1.7	257	4.6	4.5	1.0	82	6.7	-6.6	-0.9	92	23.5	-23.5	1.0	88	25.8	-25.8	-0.7			
3	—	—	—	—	266	9.2	9.2	0.7	282	9.1	8.9	-1.9	269	5.5	5.5	0.1	82	6.3	-6.2	-0.9	85	22.7	-22.6	-2.0	94	35.5	-35.4	2.4			
4	—	—	—	—	266	9.4	9.4	0.7	277	9.3	9.2	-1.1	277	4.2	4.2	-0.5	86	5.5	-5.5	-0.4	83	23.5	-23.3	-3.0	97	32.0	-31.8	3.8			
5	—	—	—	—	269	8.6	8.6	0.1	279	7.4	7.3	-1.1	265	3.6	3.6	0.3	80	7.2	-7.1	-1.2	83	21.6	-21.4	-2.7	88	34.8	-34.8	-1.3			
6	—	—	—	—	265	8.7	8.7	0.7	275	9.5	9.5	-0.9	288	4.1	3.9	-1.3	95	6.3	-6.3	0.6	82	20.2	-20.0	-2.9	90	34.8	-34.8	-0.1			
7	—	—	—	—	264	9.3	9.3	0.9	274	9.4	9.4	-0.6	257	5.3	5.2	1.2	86	7.3	-7.3	-0.5	85	18.8	-18.7	-1.5	92	33.5	-33.5	1.4			
8	—	—	—	—	268	9.5	9.5	0.3	275	8.7	8.7	-0.8	282	3.3	3.2	-0.7	88	6.4	-6.4	-0.2	87	19.6	-19.6	-1.0	91	33.4	-33.4	0.3			
9	—	—	—	—	266	10.4	10.4	0.7	276	10.0	9.9	-1.0	261	5.1	5.0	0.8	82	6.3	-6.2	-0.9	94	19.5	-19.5	1.2	94	30.7	-30.6	2.3			
10	—	—	—	—	267	9.2	9.2	0.5	281	9.7	9.5	-1.9	284	3.4	3.3	-0.8	93	6.0	-6.0	0.3	86	21.3	-21.2	-1.5	91	34.4	-34.4	0.6			
11	—	—	—	—	267	9.3	9.3	0.5	281	11.4	11.2	-2.2	274	6.0	6.0	-0.4	100	6.5	-6.4	1.1	91	23.4	-23.4	0.3	91	34.1	-34.1	0.7			
12	—	—	—	—	265	10.9	10.9	0.9	283	11.2	10.9	-2.6	272	5.4	5.4	-0.2	67	5.1	-4.7	-2.0	89	21.3	-21.3	-0.2	90	31.8	-31.8	-0.2			
13	—	—	—	—	268	10.7	10.7	0.4	285	11.7	11.3	-3.0	278	7.5	7.4	-1.0	95	6.3	-6.3	0.5	89	21.8	-21.8	-0.5	92	32.4	-32.4	1.1			
14	—	—	—	—	265	10.7	10.7	1.0	281	12.2	12.0	-2.4	268	6.2	6.2	0.2	84	5.3	-5.3	-0.6	90	21.1	-21.1	0.0	88	32.9	-32.9	-1.2			
15	—	—	—	—	271	10.3	10.3	-0.2	280	12.4	12.2	-2.1	281	5.3	5.2	-1.0	85	5.0	-5.0	-0.4	87	23.1	-23.1	-1.1	90	34.5	-34.5	-0.1			
16	—	—	—	—	268	11.0	11.0	0.4	281	11.6	11.4	-2.3	277	4.6	4.6	-0.6	110	5.4	-5.1	1.9	83	17.8	-17.7	-2.2	90	34.2	-34.2	0.1			
17	—	—	—	—	269	10.8	10.8	0.2	285	11.9	11.5	-3.0	277	4.1	4.1	-0.5	84	7.3	-7.3	-0.8	86	22.0	-21.9	-1.6	88	31.2	-31.2	-1.2			
18	—	—	—	—	271	10.0	10.0	-0.1	279	10.3	10.2	-1.6	255	3.9	3.8	1.0	94	7.7	-7.7	0.5	93	21.7	-21.7	1.3	90	33.8	-33.8	0.1			
19	—	—	—	—	265	9.4	9.4	0.8	283	9.2	9.0	-2.0	255	2.8	2.7	0.7	95	9.3	-9.3	0.8	88	22.6	-22.6	-0.6	87	38.5	-38.5	-1.8			
20	—	—	—	—	266	8.7	8.7	0.6	278	8.9	8.8	-1.3	264	3.8	3.8	0.4	98	6.3	-6.2	0.9	86	20.6	-20.6	-1.3	91	34.8	-34.8	0.8			
21	—	—	—	—	271	9.2	9.2	-0.2	279	10.8	10.7	-1.6	261	3.3	3.3	0.5	95	7.0	-7.0	0.6	90	21.0	-21.0	0.0	85	29.9	-29.8	-2.8			
22	—	—	—	—	267	8.5	8.5	0.4	278	10.0	9.9	-1.4	276	6.2	6.2	-0.7	99	7.1	-7.0	1.1	90	21.6	-21.6	0.1	91	34.1	-34.1	0.7			
23	—	—	—	—	267	9.3	9.3	0.5	282	8.5	8.3	-1.7	280	4.8	4.7	-0.8	102	7.1	-6.9	1.5	98	22.4	-22.2	3.0	87	35.4	-35.3	-1.9			
24	—	—	—	—	266	8.9	8.9	0.6	283	9.8	9.5	-2.2	260	4.1	4.0	0.7	102	8.3	-8.1	1.7	92	22.1	-22.1	0.6	90	36.6	-36.6	0.3			
25	—	—	—	—	271	9.9	9.9	-0.1	286	10.6	10.2	-2.9	277	3.8	3.8	-0.5	96	10.0	-9.9	1.1	93	23.7	-23.7	1.2	90	36.2	-36.2	0.0			
26	—	—	—	—	274	9.4	9.4	-0.7	285	10.1	9.8	-2.6	276	5.4	5.4	-0.6	99	6.5	-6.4	1.0	97	23.8	-23.6	2.9	85	35.3	-35.2	-3.2			
27	—	—	—	—	263	9.5	9.4	1.2	282	9.5	9.3	-2.0	277	3.9	3.9	-0.5	91	9.2	-9.2	0.1	86	21.8	-21.8	-1.4	91	26.4	-26.4	0.4			
28	—	—	—	—	271	8.8	8.8	-0.1	288	8.5	8.1	-2.7	279	4.9	4.8	-0.8	96	10.0	-9.9	1.0	91	22.1	-22.1	0.5	90	29.7	-29.7	0.0			
29	—	—	—	—	272	7.9	7.9	-0.3	287	8.7	8.3	-2.5	272	3.6	3.6	-0.1	98	9.5	-9.4	1.3	88	25.5	-25.5	-1.1	95	24.7	-24.6	2.2			
30	—	—	—	—	268	9.0	9.0	0.3	284	9.6	9.3	-2.3	282	4.9	4.8	-1.0	87	8.5	-8.5	-0.5	93	22.3	-22.3	1.1	92	31.9	-31.9	1.0			
31	—	—	—	—	268	9.8	9.8	0.3	287	9.5	9.1	-2.8	278	4.3	4.3	-0.6	98	6.0	-5.9	0.8	86	20.1	-20.0	-1.5	90	29.1	-29.1	0.1			

Daily Normals of Upper Air Winds (1971-2000)

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BANGLORE

AUGUST

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	—	—	—	—	269	9.2	9.2	0.1	284	10.3	10.0	-2.5	287	6.6	6.3	-1.9	83	5.9	-5.9	-0.7	88	21.2	-21.2	-0.8	93	28.7	-28.7	1.4			
2	—	—	—	—	276	10.4	10.3	-1.1	285	10.6	10.3	-2.7	280	3.6	3.5	-0.6	94	6.3	-6.3	0.4	92	22.1	-22.1	0.8	93	37.6	-37.5	2.2			
3	—	—	—	—	273	8.4	8.4	-0.5	293	7.3	6.7	-2.8	287	2.7	2.6	-0.8	98	8.9	-8.8	1.3	89	20.1	-20.1	-0.3	87	28.2	-28.2	-1.4			
4	—	—	—	—	274	7.5	7.5	-0.5	283	7.6	7.4	-1.7	272	3.0	3.0	-0.1	97	7.8	-7.7	1.0	88	21.9	-21.9	-0.8	83	33.3	-33.1	-3.9			
5	—	—	—	—	274	7.0	7.0	-0.5	290	8.1	7.6	-2.8	276	2.7	2.7	-0.3	103	6.9	-6.7	1.5	83	23.6	-23.4	-2.9	87	31.7	-31.7	-1.5			
6	—	—	—	—	271	8.2	8.2	-0.1	283	9.0	8.8	-2.0	273	3.7	3.7	-0.2	98	7.1	-7.0	1.0	90	27.0	-27.0	0.0	90	37.9	-37.9	0.0			
7	—	—	—	—	269	9.3	9.3	0.1	285	9.2	8.9	-2.4	288	5.6	5.3	-1.7	96	6.4	-6.4	0.7	91	21.5	-21.5	0.2	90	29.1	-29.1	-0.1			
8	—	—	—	—	267	8.9	8.9	0.5	279	9.2	9.1	-1.5	282	6.3	6.2	-1.3	96	6.8	-6.8	0.7	82	21.1	-20.9	-2.8	92	32.3	-32.3	0.9			
9	—	—	—	—	276	8.9	8.9	-0.9	288	8.5	8.1	-2.6	270	4.5	4.5	0.0	79	6.5	-6.4	-1.3	91	22.6	-22.6	0.3	89	32.0	-32.0	-0.7			
10	—	—	—	—	270	9.6	9.6	0.0	293	10.0	9.2	-4.0	280	3.6	3.5	-0.6	102	7.3	-7.1	1.5	92	22.7	-22.7	0.9	88	32.6	-32.6	-1.3			
11	—	—	—	—	269	8.5	8.5	0.2	280	10.5	10.3	-1.9	282	3.4	3.3	-0.7	101	9.9	-9.7	1.9	88	20.6	-20.6	-0.8	84	34.7	-34.5	-3.7			
12	—	—	—	—	274	9.1	9.1	-0.6	283	10.1	9.9	-2.2	259	1.6	1.6	0.3	94	9.1	-9.1	0.6	90	24.2	-24.2	-0.1	90	35.5	-35.5	-0.1			
13	—	—	—	—	270	9.3	9.3	0.0	284	9.8	9.5	-2.4	279	3.1	3.1	-0.5	88	8.7	-8.7	-0.3	88	21.9	-21.9	-0.6	89	38.6	-38.6	-1.0			
14	—	—	—	—	274	9.4	9.4	-0.6	279	9.8	9.7	-1.6	295	2.1	1.9	-0.9	87	9.7	-9.7	-0.5	84	23.0	-22.9	-2.5	90	34.7	-34.7	0.3			
15	—	—	—	—	269	8.7	8.7	0.1	283	9.9	9.7	-2.2	304	2.3	1.9	-1.3	93	8.3	-8.3	0.5	86	24.1	-24.0	-1.6	91	33.7	-33.7	0.4			
16	—	—	—	—	274	8.5	8.5	-0.6	284	9.6	9.3	-2.4	284	4.0	3.9	-1.0	89	6.7	-6.7	-0.1	89	21.5	-21.5	-0.2	93	30.5	-30.5	1.7			
17	—	—	—	—	273	9.1	9.1	-0.5	285	8.8	8.5	-2.2	267	5.3	5.3	0.3	99	7.4	-7.3	1.1	93	21.3	-21.3	1.2	92	30.7	-30.7	1.2			
18	—	—	—	—	276	8.4	8.4	-0.9	286	9.3	9.0	-2.5	273	3.9	3.9	-0.2	102	7.7	-7.5	1.6	91	23.5	-23.5	0.4	97	30.3	-30.1	3.7			
19	—	—	—	—	273	9.1	9.1	-0.4	286	8.1	7.8	-2.3	272	3.2	3.2	-0.1	106	9.2	-8.8	2.6	91	25.0	-25.0	0.5	87	31.5	-31.4	-1.8			
20	—	—	—	—	271	7.8	7.8	-0.1	278	7.6	7.5	-1.1	265	4.9	4.9	0.4	94	6.8	-6.8	0.5	88	21.1	-21.1	-0.8	89	33.5	-33.5	-0.6			
21	—	—	—	—	269	7.5	7.5	0.1	281	9.3	9.1	-1.7	292	4.1	3.8	-1.5	118	5.4	-4.8	2.5	88	21.7	-21.7	-0.8	96	30.1	-29.9	3.2			
22	—	—	—	—	275	8.3	8.3	-0.7	283	9.6	9.3	-2.2	270	3.5	3.5	0.0	100	8.2	-8.1	1.5	79	21.0	-20.6	-4.0	92	28.4	-28.4	1.0			
23	—	—	—	—	275	7.3	7.3	-0.6	287	9.0	8.6	-2.7	266	2.7	2.7	0.2	95	9.2	-9.2	0.8	90	20.9	-20.9	0.1	95	28.4	-28.3	2.5			
24	—	—	—	—	271	8.2	8.2	-0.2	280	8.9	8.8	-1.6	262	4.1	4.1	0.6	100	8.0	-7.9	1.4	90	22.0	-22.0	-0.1	88	26.6	-26.6	-0.9			
25	—	—	—	—	272	7.1	7.1	-0.3	284	8.8	8.5	-2.1	282	5.2	5.1	-1.1	86	7.0	-7.0	-0.5	86	22.1	-22.0	-1.5	95	27.1	-27.0	2.3			
26	—	—	—	—	273	8.5	8.5	-0.4	282	9.9	9.7	-2.1	295	5.1	4.6	-2.1	92	5.1	-5.1	0.2	90	21.3	-21.3	0.0	87	24.7	-24.7	-1.5			
27	—	—	—	—	276	8.1	8.1	-0.8	288	9.5	9.0	-3.0	272	6.2	6.2	-0.2	112	6.7	-6.2	2.5	90	20.3	-20.3	0.1	94	21.1	-21.1	1.3			
28	—	—	—	—	273	8.8	8.8	-0.5	287	9.5	9.1	-2.7	283	4.0	3.9	-0.9	109	6.9	-6.5	2.3	87	17.1	-17.1	-0.9	93	29.4	-29.4	1.6			
29	—	—	—	—	275	7.6	7.6	-0.6	290	8.6	8.1	-3.0	278	4.2	4.2	-0.6	104	7.6	-7.4	1.9	90	21.6	-21.6	-0.1	90	28.2	-28.2	-0.2			
30	—	—	—	—	265	7.3	7.3	0.6	286	8.1	7.8	-2.2	280	4.5	4.4	-0.8	87	9.0	-9.0	-0.4	94	23.9	-23.8	1.8	90	26.3	-26.3	-0.2			
31	—	—	—	—	277	7.2	7.1	-0.9	282	6.6	6.5	-1.4	278	4.5	4.5	-0.6	83	8.8	-8.7	-1.1	86	23.6	-23.5	-1.7	80	25.3	-24.9	-4.4			

Daily Normals of Upper Air Winds (1971-2000)

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BANGLORE

SEPTEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	—	—	—	—	277	6.6	6.6	-0.8	279	6.4	6.3	-1.0	270	2.4	2.4	0.0	96	10.0	-10.0	1.0	89	24.4	-24.4	-0.6	99	25.5	-25.2	3.8			
2	—	—	—	—	272	5.6	5.6	-0.2	276	6.3	6.3	-0.7	238	0.9	0.8	0.5	93	8.6	-8.6	0.4	88	21.6	-21.6	-0.7	93	26.5	-26.5	1.2			
3	—	—	—	—	263	5.6	5.6	0.7	284	6.6	6.4	-1.6	295	1.7	1.5	-0.7	91	7.5	-7.5	0.1	86	21.3	-21.2	-1.6	93	22.8	-22.8	1.0			
4	—	—	—	—	276	6.3	6.3	-0.7	277	6.2	6.1	-0.8	281	2.0	2.0	-0.4	101	10.1	-9.9	2.0	91	25.0	-25.0	0.4	89	27.8	-27.8	-0.5			
5	—	—	—	—	274	5.6	5.6	-0.4	284	4.9	4.8	-1.2	276	3.1	3.1	-0.3	87	7.7	-7.7	-0.4	90	18.9	-18.9	0.1	81	22.1	-21.8	-3.5			
6	—	—	—	—	278	5.7	5.6	-0.8	287	5.9	5.7	-1.7	283	1.8	1.8	-0.4	95	9.8	-9.8	0.8	92	23.0	-23.0	1.0	93	25.7	-25.7	1.5			
7	—	—	—	—	278	4.9	4.9	-0.7	284	6.3	6.1	-1.5	290	2.9	2.7	-1.0	75	8.5	-8.2	-2.2	82	21.2	-21.0	-2.9	92	25.0	-25.0	0.9			
8	—	—	—	—	285	5.6	5.4	-1.4	290	5.5	5.2	-1.9	302	1.9	1.6	-1.0	95	7.5	-7.5	0.7	96	21.0	-20.9	2.2	87	22.5	-22.5	-1.2			
9	—	—	—	—	285	5.2	5.0	-1.3	290	4.9	4.6	-1.7	280	2.2	2.2	-0.4	91	7.7	-7.7	0.2	94	19.4	-19.4	1.3	89	21.2	-21.2	-0.3			
10	—	—	—	—	293	5.6	5.2	-2.2	300	4.4	3.8	-2.2	287	1.4	1.3	-0.4	100	7.1	-7.0	1.2	84	19.5	-19.4	-2.1	92	19.7	-19.7	0.8			
11	—	—	—	—	279	5.4	5.3	-0.8	294	5.4	4.9	-2.2	290	3.0	2.8	-1.0	97	6.2	-6.1	0.8	89	17.6	-17.6	-0.4	97	24.1	-23.9	3.1			
12	—	—	—	—	284	5.0	4.9	-1.2	285	3.8	3.7	-1.0	310	1.6	1.2	-1.0	112	7.0	-6.5	2.6	99	16.5	-16.3	2.5	92	19.8	-19.8	0.8			
13	—	—	—	—	282	3.3	3.2	-0.7	288	3.5	3.3	-1.1	67	0.8	-0.7	-0.3	109	7.2	-6.8	2.3	95	17.4	-17.3	1.4	86	17.8	-17.8	-1.1			
14	—	—	—	—	294	3.0	2.7	-1.2	297	3.0	2.7	-1.4	225	0.6	0.4	0.4	97	6.4	-6.3	0.8	96	16.1	-16.0	1.8	95	23.0	-22.9	2.1			
15	—	—	—	—	277	3.5	3.5	-0.4	299	1.8	1.6	-0.9	236	0.4	0.3	0.2	97	8.0	-7.9	1.0	97	15.3	-15.2	1.8	99	19.4	-19.2	3.1			
16	—	—	—	—	303	3.0	2.5	-1.6	302	1.9	1.6	-1.0	96	1.8	-1.8	0.2	94	9.1	-9.1	0.7	99	16.2	-16.0	2.5	93	25.9	-25.9	1.5			
17	—	—	—	—	274	2.9	2.9	-0.2	309	1.9	1.5	-1.2	104	1.6	-1.6	0.4	107	8.5	-8.1	2.5	101	16.5	-16.2	3.2	98	23.1	-22.8	3.4			
18	—	—	—	—	276	4.0	4.0	-0.4	308	3.3	2.6	-2.0	18	0.3	-0.1	-0.3	104	6.4	-6.2	1.5	99	15.5	-15.3	2.3	95	24.7	-24.6	2.1			
19	—	—	—	—	281	3.7	3.6	-0.7	288	4.2	4.0	-1.3	312	1.5	1.1	-1.0	89	6.9	-6.9	-0.1	99	14.7	-14.5	2.2	102	24.0	-23.5	4.8			
20	—	—	—	—	294	4.4	4.0	-1.8	303	4.3	3.6	-2.3	212	0.9	0.5	0.8	103	5.3	-5.2	1.2	95	15.2	-15.1	1.3	92	18.5	-18.5	0.7			
21	—	—	—	—	272	4.7	4.7	-0.2	292	4.3	4.0	-1.6	315	2.1	1.5	-1.5	95	6.4	-6.4	0.6	93	15.1	-15.1	0.8	91	21.8	-21.8	0.4			
22	—	—	—	—	273	3.8	3.8	-0.2	296	3.9	3.5	-1.7	336	1.0	0.4	-0.9	103	6.9	-6.7	1.6	100	17.7	-17.4	3.2	95	20.6	-20.5	1.9			
23	—	—	—	—	276	3.9	3.9	-0.4	284	3.6	3.5	-0.9	333	1.6	0.7	-1.4	102	8.1	-7.9	1.7	105	15.7	-15.2	4.1	109	15.7	-14.9	5.1			
24	—	—	—	—	288	4.1	3.9	-1.3	308	4.7	3.7	-2.9	162	0.9	-0.3	0.9	111	6.4	-6.0	2.3	86	14.4	-14.4	-1.0	93	16.5	-16.5	0.8			
25	—	—	—	—	270	1.6	1.6	0.0	326	0.7	0.4	-0.6	117	1.6	-1.4	0.7	96	7.6	-7.6	0.8	101	14.1	-13.8	2.7	103	21.4	-20.9	4.7			
26	—	—	—	—	272	3.6	3.6	-0.1	289	1.8	1.7	-0.6	163	1.4	-0.4	1.3	88	5.6	-5.6	-0.2	91	10.3	-10.3	0.2	92	18.9	-18.9	0.7			
27	—	—	—	—	272	3.6	3.6	-0.1	280	3.5	3.4	-0.6	360	0.9	0.0	-0.9	104	5.4	-5.2	1.3	91	14.7	-14.7	0.3	94	19.1	-19.0	1.4			
28	—	—	—	—	272	3.0	3.0	-0.1	298	2.4	2.1	-1.1	307	0.5	0.4	-0.3	92	6.0	-6.0	0.2	96	14.2	-14.1	1.5	91	19.9	-19.9	0.5			
29	—	—	—	—	282	2.4	2.3	-0.5	306	1.9	1.5	-1.1	36	0.9	-0.5	-0.7	74	5.4	-5.2	-1.5	94	12.8	-12.8	0.8	79	13.4	-13.2	-2.5			
30	—	—	—	—	275	2.3	2.3	-0.2	303	2.0	1.7	-1.1	27	1.1	-0.5	-1.0	87	5.3	-5.3	-0.3	101	13.5	-13.2	2.6	97	14.3	-14.2	1.8			

Daily Normals of Upper Air Winds (1971-2000)

BANGLORE

OCTOBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	—	—	—	—	304	2.3	1.9	-1.3	344	1.8	0.5	-1.7	45	1.4	-1.0	-1.0	95	4.8	-4.8	0.4	92	14.2	-14.2	0.4	98	15.5	-15.3	2.2			
2	—	—	—	—	278	2.8	2.8	-0.4	308	2.3	1.8	-1.4	270	2.2	2.2	0.0	91	4.5	-4.5	0.1	97	15.1	-15.0	1.9	93	16.7	-16.7	1.0			
3	—	—	—	—	278	3.0	3.0	-0.4	298	2.1	1.9	-1.0	229	1.8	1.4	1.2	92	5.7	-5.7	0.2	88	16.1	-16.1	-0.5	100	19.0	-18.7	3.2			
4	—	—	—	—	303	3.1	2.6	-1.7	313	3.7	2.7	-2.5	293	1.3	1.2	-0.5	91	5.1	-5.1	0.1	95	14.0	-13.9	1.2	87	13.7	-13.7	-0.7			
5	—	—	—	—	290	4.5	4.2	-1.5	297	4.5	4.0	-2.0	349	2.0	0.4	-2.0	96	4.8	-4.8	0.5	97	14.1	-14.0	1.8	92	11.6	-11.6	0.4			
6	—	—	—	—	299	3.1	2.7	-1.5	311	2.1	1.6	-1.4	169	0.5	-0.1	0.5	119	3.9	-3.4	1.9	100	13.3	-13.1	2.4	91	16.1	-16.1	0.4			
7	—	—	—	—	330	3.2	1.6	-2.8	347	1.3	0.3	-1.3	243	1.8	1.6	0.8	91	4.3	-4.3	0.1	106	15.2	-14.6	4.3	96	11.5	-11.4	1.1			
8	—	—	—	—	327	2.0	1.1	-1.7	6	1.9	-0.2	-1.9	29	1.3	-0.6	-1.1	102	6.3	-6.2	1.3	104	14.2	-13.8	3.5	94	11.4	-11.4	0.8			
9	—	—	—	—	327	2.0	1.1	-1.7	324	1.4	0.8	-1.1	108	2.3	-2.2	0.7	96	3.6	-3.6	0.4	100	12.0	-11.8	2.0	98	9.7	-9.6	1.4			
10	—	—	—	—	332	1.7	0.8	-1.5	351	1.3	0.2	-1.3	81	2.4	-2.4	-0.4	93	5.0	-5.0	0.3	107	10.2	-9.7	3.0	96	7.5	-7.5	0.8			
11	—	—	—	—	360	1.2	0.0	-1.2	252	0.3	0.3	0.1	92	2.3	-2.3	0.1	83	4.3	-4.3	-0.5	107	8.2	-7.8	2.4	105	8.4	-8.1	2.1			
12	—	—	—	—	4	1.3	-0.1	-1.3	34	0.7	-0.4	-0.6	76	2.1	-2.0	-0.5	104	4.2	-4.1	1.0	102	9.4	-9.2	1.9	110	13.2	-12.4	4.5			
13	—	—	—	—	24	2.7	-1.1	-2.5	39	2.1	-1.3	-1.6	62	3.6	-3.2	-1.7	68	4.0	-3.7	-1.5	96	8.9	-8.8	1.0	105	11.3	-10.9	2.9			
14	—	—	—	—	2	3.0	-0.1	-3.0	28	2.4	-1.1	-2.1	43	1.8	-1.2	-1.3	119	4.5	-3.9	2.2	115	8.5	-7.7	3.6	94	11.3	-11.3	0.7			
15	—	—	—	—	13	2.2	-0.5	-2.1	360	2.1	0.0	-2.1	36	1.9	-1.1	-1.5	87	3.8	-3.8	-0.2	101	9.6	-9.4	1.9	83	16.3	-16.2	-1.9			
16	—	—	—	—	13	2.3	-0.5	-2.2	350	2.2	0.4	-2.2	39	1.3	-0.8	-1.0	140	3.3	-2.1	2.5	103	8.7	-8.5	1.9	99	17.2	-17.0	2.7			
17	—	—	—	—	13	1.7	-0.4	-1.7	32	3.2	-1.7	-2.7	57	3.1	-2.6	-1.7	98	4.1	-4.1	0.6	104	8.9	-8.6	2.2	96	14.5	-14.4	1.6			
18	—	—	—	—	20	3.0	-1.0	-2.8	6	2.9	-0.3	-2.9	92	2.5	-2.5	0.1	100	5.3	-5.2	0.9	99	11.6	-11.4	1.9	101	13.4	-13.1	2.6			
19	—	—	—	—	41	2.1	-1.4	-1.6	27	2.5	-1.1	-2.2	81	1.8	-1.8	-0.3	103	5.3	-5.2	1.2	108	10.4	-9.9	3.2	92	14.3	-14.3	0.4			
20	—	—	—	—	66	3.6	-3.3	-1.5	53	2.5	-2.0	-1.5	84	3.0	-3.0	-0.3	92	3.4	-3.4	0.1	98	6.2	-6.1	0.9	102	11.9	-11.6	2.5			
21	—	—	—	—	65	3.5	-3.2	-1.5	72	2.2	-2.1	-0.7	93	2.0	-2.0	0.1	110	4.9	-4.6	1.7	111	6.2	-5.8	2.2	95	10.4	-10.4	0.9			
22	—	—	—	—	41	2.0	-1.3	-1.5	117	1.1	-1.0	0.5	139	2.1	-1.4	1.6	103	1.7	-1.7	0.4	82	6.0	-5.9	-0.8	81	8.3	-8.2	-1.3			
23	—	—	—	—	58	3.2	-2.7	-1.7	83	1.6	-1.6	-0.2	135	1.3	-0.9	0.9	72	2.8	-2.7	-0.9	100	8.1	-8.0	1.4	105	12.6	-12.2	3.3			
24	—	—	—	—	81	3.1	-3.1	-0.5	96	3.8	-3.8	0.4	111	2.6	-2.4	0.9	113	3.4	-3.1	1.3	138	5.9	-4.0	4.4	105	6.3	-6.1	1.6			
25	—	—	—	—	90	3.3	-3.3	0.0	90	2.0	-2.0	0.0	91	4.6	-4.6	0.1	106	4.6	-4.4	1.3	120	3.6	-3.1	1.8	99	8.6	-8.5	1.4			
26	—	—	—	—	66	3.6	-3.3	-1.5	71	3.1	-2.9	-1.0	87	4.3	-4.3	-0.2	84	4.4	-4.4	-0.5	126	7.1	-5.7	4.2	111	6.6	-6.2	2.4			
27	—	—	—	—	58	4.9	-4.1	-2.6	52	2.8	-2.2	-1.7	102	1.9	-1.9	0.4	75	2.4	-2.3	-0.6	123	7.4	-6.2	4.1	86	7.5	-7.5	-0.5			
28	—	—	—	—	53	3.1	-2.5	-1.9	36	2.4	-1.4	-1.9	84	2.0	-2.0	-0.2	136	2.8	-1.9	2.0	134	6.2	-4.4	4.3	118	7.9	-7.0	3.7			
29	—	—	—	—	43	3.3	-2.2	-2.4	34	2.5	-1.4	-2.1	31	2.1	-1.1	-1.8	207	0.9	0.4	0.8	140	4.2	-2.7	3.2	106	9.6	-9.2	2.7			
30	—	—	—	—	32	4.0	-2.1	-3.4	21	1.7	-0.6	-1.6	88	2.6	-2.6	-0.1	140	1.7	-1.1	1.3	141	5.3	-3.3	4.1	131	6.4	-4.8	4.2			
31	—	—	—	—	43	3.8	-2.6	-2.8	36	1.9	-1.1	-1.5	61	1.0	-0.9	-0.5	196	1.9	0.5	1.8	159	6.0	-2.1	5.6	108	8.4	-8.0	2.6			

Daily Normals of Upper Air Winds (1971-2000)

59

BANGLORE

NOVEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	—	—	—	—	50	3.9	-3.0	-2.5	67	3.4	-3.1	-1.3	63	3.3	-2.9	-1.5	158	1.1	-0.4	1.0	146	6.0	-3.4	5.0	86	5.6	-5.6	-0.4			
2	—	—	—	—	63	3.7	-3.3	-1.7	74	2.6	-2.5	-0.7	65	4.7	-4.3	-2.0	113	1.5	-1.4	0.6	129	8.6	-6.7	5.4	57	3.1	-2.6	-1.7			
3	—	—	—	—	50	3.8	-2.9	-2.4	78	2.5	-2.4	-0.5	72	4.0	-3.8	-1.2	137	2.5	-1.7	1.8	138	9.0	-6.0	6.7	96	7.1	-7.1	0.7			
4	—	—	—	—	55	4.4	-3.6	-2.5	63	3.8	-3.4	-1.7	67	4.4	-4.1	-1.7	132	2.4	-1.8	1.6	146	6.8	-3.8	5.6	73	4.4	-4.2	-1.3			
5	—	—	—	—	53	4.6	-3.7	-2.8	61	3.7	-3.2	-1.8	82	2.8	-2.8	-0.4	127	2.5	-2.0	1.5	153	6.3	-2.8	5.6	115	4.7	-4.3	2.0			
6	—	—	—	—	70	3.7	-3.5	-1.3	63	2.9	-2.6	-1.3	74	3.2	-3.1	-0.9	42	1.3	-0.9	-1.0	152	7.2	-3.4	6.3	105	6.4	-6.2	1.7			
7	—	—	—	—	70	3.7	-3.5	-1.3	65	3.5	-3.2	-1.5	90	4.5	-4.5	0.0	217	0.5	0.3	0.4	158	8.0	-3.0	7.4	121	7.9	-6.8	4.1			
8	—	—	—	—	76	3.8	-3.7	-0.9	67	2.5	-2.3	-1.0	74	4.8	-4.6	-1.3	128	1.8	-1.4	1.1	162	6.9	-2.1	6.6	101	5.1	-5.0	1.0			
9	—	—	—	—	69	3.4	-3.2	-1.2	60	2.4	-2.1	-1.2	72	5.2	-5.0	-1.6	103	1.8	-1.8	0.4	144	6.5	-3.8	5.3	90	9.6	-9.6	0.0			
10	—	—	—	—	63	4.0	-3.6	-1.8	81	2.4	-2.4	-0.4	71	6.4	-6.0	-2.1	135	2.1	-1.5	1.5	171	4.4	-0.7	4.3	89	5.8	-5.8	-0.1			
11	—	—	—	—	57	4.5	-3.8	-2.5	61	3.3	-2.9	-1.6	66	6.0	-5.5	-2.4	118	3.2	-2.8	1.5	137	4.4	-3.0	3.2	115	3.1	-2.8	1.3			
12	—	—	—	—	52	4.8	-3.8	-3.0	62	3.2	-2.8	-1.5	57	5.0	-4.2	-2.7	100	3.5	-3.4	0.6	131	7.2	-5.5	4.7	101	6.2	-6.1	1.2			
13	—	—	—	—	60	3.6	-3.1	-1.8	46	3.0	-2.2	-2.1	78	3.5	-3.4	-0.7	122	1.5	-1.3	0.8	151	7.8	-3.8	6.8	107	5.1	-4.9	1.5			
14	—	—	—	—	70	3.7	-3.5	-1.3	40	2.5	-1.6	-1.9	86	3.2	-3.2	-0.2	143	3.1	-1.9	2.5	164	6.2	-1.7	6.0	110	5.1	-4.8	1.7			
15	—	—	—	—	67	4.4	-4.1	-1.7	58	1.9	-1.6	-1.0	75	4.6	-4.4	-1.2	119	2.3	-2.0	1.1	156	6.4	-2.6	5.9	111	6.6	-6.1	2.4			
16	—	—	—	—	87	3.7	-3.7	-0.2	65	1.9	-1.7	-0.8	65	2.6	-2.4	-1.1	117	3.7	-3.3	1.7	150	7.5	-3.7	6.5	105	7.1	-6.9	1.8			
17	—	—	—	—	66	2.2	-2.0	-0.9	79	1.5	-1.5	-0.3	85	1.1	-1.1	-0.1	213	2.0	1.1	1.7	164	7.1	-2.0	6.8	103	2.6	-2.5	0.6			
18	—	—	—	—	63	3.1	-2.8	-1.4	47	1.6	-1.2	-1.1	90	1.4	-1.4	0.0	212	2.5	1.3	2.1	164	8.9	-2.4	8.6	97	7.0	-7.0	0.8			
19	—	—	—	—	63	3.7	-3.3	-1.7	63	2.0	-1.8	-0.9	52	3.4	-2.7	-2.1	214	3.0	1.7	2.5	178	10.0	-0.4	10.0	85	2.3	-2.3	-0.2			
20	—	—	—	—	64	4.6	-4.1	-2.0	64	2.8	-2.5	-1.2	53	3.5	-2.8	-2.1	209	5.3	2.6	4.6	194	8.6	2.1	8.3	116	3.9	-3.5	1.7			
21	—	—	—	—	67	4.1	-3.8	-1.6	59	2.6	-2.2	-1.3	84	1.8	-1.8	-0.2	220	4.3	2.8	3.3	187	8.6	1.1	8.5	136	4.2	-2.9	3.0			
22	—	—	—	—	70	4.4	-4.1	-1.5	72	3.2	-3.0	-1.0	68	2.4	-2.2	-0.9	226	4.0	2.9	2.8	186	8.8	0.9	8.8	162	3.6	-1.1	3.4			
23	—	—	—	—	71	4.9	-4.6	-1.6	66	2.4	-2.2	-1.0	34	1.4	-0.8	-1.2	228	2.4	1.8	1.6	196	8.9	2.5	8.5	122	0.9	-0.8	0.5			
24	—	—	—	—	69	3.6	-3.4	-1.3	66	2.7	-2.5	-1.1	38	4.3	-2.7	-3.4	234	3.7	3.0	2.2	223	5.7	3.9	4.2	113	4.0	-3.7	1.6			
25	—	—	—	—	62	3.0	-2.6	-1.4	45	1.8	-1.3	-1.3	50	3.3	-2.5	-2.1	278	2.1	2.1	-0.3	165	7.6	-2.0	7.3	107	3.0	-2.9	0.9			
26	—	—	—	—	59	4.1	-3.5	-2.1	39	1.9	-1.2	-1.5	45	4.1	-2.9	-2.9	268	2.9	2.9	0.1	190	5.5	1.0	5.4	125	2.4	-2.0	1.4			
27	—	—	—	—	55	3.8	-3.1	-2.2	69	2.8	-2.6	-1.0	63	4.4	-3.9	-2.0	259	3.3	3.2	0.6	203	6.5	2.6	6.0	155	3.3	-1.4	3.0			
28	—	—	—	—	71	4.9	-4.6	-1.6	67	3.0	-2.8	-1.2	66	2.7	-2.5	-1.1	243	2.9	2.6	1.3	179	9.9	-0.2	9.9	92	3.1	-3.1	0.1			
29	—	—	—	—	70	5.0	-4.7	-1.7	86	2.7	-2.7	-0.2	63	6.8	-6.0	-3.1	208	3.4	1.6	3.0	183	8.8	0.4	8.8	103	8.1	-7.9	1.8			
30	—	—	—	—	77	4.7	-4.6	-1.1	84	3.0	-3.0	-0.3	82	4.3	-4.3	-0.6	241	2.3	2.0	1.1	202	7.5	2.8	7.0	150	4.4	-2.2	3.8			

Daily Normals of Upper Air Winds (1971-2000)

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BANGLORE

DECEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	—	—	—	—	70	5.3	-5.0	-1.8	76	2.9	-2.8	-0.7	84	4.0	-4.0	-0.4	220	1.7	1.1	1.3	201	7.7	2.8	7.2	199	2.4	0.8	2.3			
2	—	—	—	—	76	5.3	-5.1	-1.3	99	4.9	-4.8	0.8	81	4.0	-4.0	-0.6	194	4.5	1.1	4.4	184	9.2	0.6	9.2	149	3.5	-1.8	3.0			
3	—	—	—	—	84	5.4	-5.4	-0.6	87	5.1	-5.1	-0.3	61	4.7	-4.1	-2.3	205	2.6	1.1	2.4	183	9.7	0.5	9.7	121	2.1	-1.8	1.1			
4	—	—	—	—	70	6.3	-5.9	-2.1	75	4.9	-4.7	-1.3	61	6.3	-5.5	-3.0	41	1.1	-0.7	-0.8	170	6.2	-1.1	6.1	105	3.9	-3.8	1.0			
5	—	—	—	—	62	5.5	-4.9	-2.6	68	4.1	-3.8	-1.5	56	4.3	-3.6	-2.4	221	2.9	1.9	2.2	174	6.9	-0.7	6.9	138	3.0	-2.0	2.2			
6	—	—	—	—	60	4.8	-4.2	-2.4	79	3.6	-3.5	-0.7	46	5.2	-3.7	-3.6	195	3.4	0.9	3.3	199	6.4	2.1	6.0	119	4.1	-3.6	2.0			
7	—	—	—	—	73	4.8	-4.6	-1.4	70	4.5	-4.2	-1.5	69	3.1	-2.9	-1.1	244	4.1	3.7	1.8	186	8.9	1.0	8.8	61	2.9	-2.5	-1.4			
8	—	—	—	—	75	5.2	-5.0	-1.3	68	4.3	-4.0	-1.6	3	1.9	-0.1	-1.9	258	3.9	3.8	0.8	182	7.3	0.2	7.3	111	2.6	-2.4	0.9			
9	—	—	—	—	78	4.5	-4.4	-0.9	87	3.4	-3.4	-0.2	50	0.8	-0.6	-0.5	236	4.5	3.7	2.5	195	8.6	2.3	8.3	222	1.5	1.0	1.1			
10	—	—	—	—	90	5.3	-5.3	0.0	84	2.8	-2.8	-0.3	58	1.3	-1.1	-0.7	217	5.3	3.2	4.2	203	8.9	3.4	8.2	173	2.6	-0.3	2.6			
11	—	—	—	—	89	5.6	-5.6	-0.1	93	3.6	-3.6	0.2	85	4.4	-4.4	-0.4	214	4.3	2.4	3.6	200	9.7	3.3	9.1	175	4.3	-0.4	4.3			
12	—	—	—	—	89	5.2	-5.2	-0.1	87	5.0	-5.0	-0.3	107	4.4	-4.2	1.3	208	4.2	2.0	3.7	201	8.6	3.1	8.0	184	2.9	0.2	2.9			
13	—	—	—	—	81	6.1	-6.0	-1.0	99	3.7	-3.7	0.6	86	2.8	-2.8	-0.2	235	5.6	4.6	3.2	205	6.2	2.6	5.6	123	2.0	-1.7	1.1			
14	—	—	—	—	79	5.7	-5.6	-1.1	69	3.9	-3.6	-1.4	93	3.3	-3.3	0.2	245	4.4	4.0	1.9	208	8.1	3.8	7.1	123	3.8	-3.2	2.1			
15	—	—	—	—	80	5.5	-5.4	-1.0	68	3.8	-3.5	-1.4	99	1.9	-1.9	0.3	243	6.1	5.4	2.8	220	8.4	5.4	6.4	36	3.9	-2.3	-3.2			
16	—	—	—	—	82	5.2	-5.2	-0.7	84	3.7	-3.7	-0.4	92	2.9	-2.9	0.1	245	6.3	5.7	2.7	215	9.3	5.4	7.6	119	5.6	-4.9	2.7			
17	—	—	—	—	90	5.0	-5.0	0.0	83	3.9	-3.9	-0.5	54	1.9	-1.5	-1.1	249	7.9	7.4	2.9	213	12.7	6.9	10.7	208	1.5	0.7	1.3			
18	—	—	—	—	89	5.0	-5.0	-0.1	77	3.9	-3.8	-0.9	88	3.0	-3.0	-0.1	280	4.2	4.1	-0.7	229	11.2	8.4	7.4	207	0.7	0.3	0.6			
19	—	—	—	—	81	5.3	-5.2	-0.8	74	4.5	-4.3	-1.2	85	3.3	-3.3	-0.3	250	5.1	4.8	1.7	223	8.3	5.7	6.1	285	3.8	3.7	-1.0			
20	—	—	—	—	84	5.5	-5.5	-0.6	75	4.2	-4.1	-1.1	49	3.2	-2.4	-2.1	255	3.0	2.9	0.8	212	9.1	4.8	7.7	14	2.1	-0.5	-2.0			
21	—	—	—	—	79	5.8	-5.7	-1.1	87	3.8	-3.8	-0.2	64	3.7	-3.3	-1.6	271	4.7	4.7	-0.1	228	9.4	7.0	6.3	88	3.4	-3.4	-0.1			
22	—	—	—	—	85	5.2	-5.2	-0.5	78	4.5	-4.4	-0.9	73	3.4	-3.3	-1.0	287	3.4	3.3	-1.0	223	8.6	5.9	6.3	135	4.5	-3.2	3.2			
23	—	—	—	—	85	4.6	-4.6	-0.4	73	4.2	-4.0	-1.2	60	3.0	-2.6	-1.5	260	7.7	7.6	1.4	245	10.8	9.8	4.5	153	2.5	-1.1	2.2			
24	—	—	—	—	83	4.2	-4.2	-0.5	62	3.2	-2.8	-1.5	14	0.8	-0.2	-0.8	250	7.1	6.7	2.4	215	10.8	6.2	8.8	251	4.9	4.6	1.6			
25	—	—	—	—	102	4.2	-4.1	0.9	80	2.7	-2.7	-0.5	45	0.3	-0.2	-0.2	242	8.0	7.1	3.7	243	13.1	11.7	5.9	188	2.1	0.3	2.1			
26	—	—	—	—	99	4.7	-4.6	0.7	72	2.2	-2.1	-0.7	125	1.9	-1.6	1.1	248	6.9	6.4	2.6	237	7.7	6.5	4.2	158	2.4	-0.9	2.2			
27	—	—	—	—	94	5.6	-5.6	0.4	85	2.5	-2.5	-0.2	113	2.3	-2.1	0.9	210	4.4	2.2	3.8	241	9.0	7.8	4.4	341	2.1	0.7	-2.0			
28	—	—	—	—	88	5.7	-5.7	-0.2	81	2.6	-2.6	-0.4	134	3.2	-2.3	2.2	236	5.2	4.3	2.9	248	13.7	12.7	5.1	165	3.0	-0.8	2.9			
29	—	—	—	—	91	4.8	-4.8	0.1	90	2.5	-2.5	0.0	121	1.7	-1.5	0.9	245	7.0	6.3	3.0	234	7.9	6.4	4.6	83	3.5	-3.5	-0.4			
30	—	—	—	—	92	4.7	-4.7	0.2	103	1.7	-1.7	0.4	32	1.3	-0.7	-1.1	277	7.8	7.7	-1.0	246	15.3	13.9	6.3	255	4.2	4.1	1.1			
31	—	—	—	—	88	4.9	-4.9	-0.2	99	2.6	-2.6	0.4	104	0.4	-0.4	0.1	250	7.5	7.0	2.6	228	8.1	6.1	5.4	107	3.8	-3.6	1.1			

Daily Normals of Upper Air Winds (1971-2000)

BHOPAL

JANUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	44	2.9	-2.0	-2.1	309	2.1	1.6	-1.3	274	9.4	9.4	-0.6	277	17.9	17.8	-2.2	272	30.2	30.2	-1.3	262	38.0	37.6	5.3	258	25.0	24.5	5.2
2	45	0.6	-0.4	-0.4	279	2.4	2.4	-0.4	277	8.6	8.5	-1.0	278	18.1	17.9	-2.6	265	34.7	34.6	2.9	267	47.6	47.5	2.6	—	—	—	—
3	2	2.3	-0.1	-2.3	321	2.1	1.3	-1.6	290	7.8	7.3	-2.7	289	16.4	15.5	-5.4	275	31.8	31.7	-2.9	272	38.7	38.7	-1.1	—	—	—	—
4	333	2.0	0.9	-1.8	286	1.8	1.7	-0.5	284	7.9	7.7	-1.9	273	18.7	18.7	-1.1	281	33.4	32.8	-6.1	278	45.7	45.2	-6.6	—	—	—	—
5	45	1.6	-1.1	-1.1	270	1.4	1.4	0.0	270	8.7	8.7	0.0	274	20.3	20.3	-1.4	268	39.0	39.0	1.7	283	40.7	39.7	-9.1	—	—	—	—
6	342	1.6	0.5	-1.5	267	2.1	2.1	0.1	271	7.8	7.8	-0.1	275	17.0	16.9	-1.6	273	35.1	35.0	-2.1	281	40.5	39.7	-8.0	—	—	—	—
7	14	0.8	-0.2	-0.8	262	1.5	1.5	0.2	269	8.1	8.1	0.1	276	20.8	20.7	-2.3	283	31.1	30.3	-7.1	268	44.4	44.4	1.9	273	56.0	55.9	-2.9
8	265	1.1	1.1	0.1	274	1.6	1.6	-0.1	271	9.0	9.0	-0.1	270	21.5	21.5	0.0	275	37.6	37.5	-3.0	320	38.0	24.4	-29.1	—	—	—	—
9	344	0.7	0.2	-0.7	277	2.4	2.4	-0.3	274	9.7	9.7	-0.7	271	22.1	22.1	-0.4	266	33.7	33.6	2.1	266	42.1	42.0	3.0	—	—	—	—
10	270	0.1	0.1	0.0	286	1.5	1.4	-0.4	266	10.2	10.2	0.8	270	21.1	21.1	-0.1	272	37.5	37.5	-1.1	263	45.6	45.2	5.8	—	—	—	—
11	312	1.2	0.9	-0.8	277	2.5	2.5	-0.3	265	11.4	11.4	1.0	272	23.6	23.6	-0.7	274	39.5	39.4	-2.5	263	52.6	52.2	6.3	—	—	—	—
12	270	0.6	0.6	0.0	258	3.8	3.7	0.8	268	10.2	10.2	0.3	275	22.4	22.3	-1.8	276	36.2	36.0	-3.5	270	32.0	32.0	-0.2	272	42.0	42.0	-1.5
13	331	2.1	1.0	-1.8	263	2.5	2.5	0.3	280	10.1	9.9	-1.8	276	21.9	21.8	-2.1	265	36.7	36.6	3.2	269	41.4	41.4	0.4	—	—	—	—
14	45	1.3	-0.9	-0.9	287	2.4	2.3	-0.7	269	12.2	12.2	0.2	267	22.7	22.7	1.3	263	40.0	39.7	4.9	268	46.0	46.0	1.4	—	—	—	—
15	275	3.3	3.3	-0.3	265	5.3	5.3	0.5	264	13.1	13.0	1.3	269	24.1	24.1	0.6	276	39.1	38.9	-4.0	265	44.9	44.7	3.7	—	—	—	—
16	331	2.5	1.2	-2.2	292	3.8	3.5	-1.4	278	10.7	10.6	-1.5	274	22.6	22.6	-1.4	276	39.6	39.4	-4.0	282	38.0	37.2	-7.8	250	26.0	24.4	8.9
17	2	2.4	-0.1	-2.4	284	3.3	3.2	-0.8	269	11.0	11.0	0.2	277	20.0	19.8	-2.5	276	41.3	41.1	-4.3	283	45.2	44.1	-9.9	—	—	—	—
18	3	1.8	-0.1	-1.8	285	2.7	2.6	-0.7	265	9.4	9.4	0.8	271	18.5	18.5	-0.2	277	42.6	42.2	-5.5	290	53.0	49.8	-18.1	—	—	—	—
19	313	1.9	1.4	-1.3	274	4.0	4.0	-0.3	270	10.1	10.1	0.0	276	22.8	22.7	-2.2	278	40.3	39.9	-5.5	281	41.8	41.1	-7.8	—	—	—	—
20	336	1.7	0.7	-1.6	306	3.1	2.5	-1.8	276	10.9	10.8	-1.1	279	22.8	22.5	-3.5	274	42.5	42.4	-3.2	278	37.0	36.6	-5.1	—	—	—	—
21	41	2.0	-1.3	-1.5	299	2.6	2.3	-1.3	268	12.5	12.5	0.5	281	23.0	22.6	-4.5	262	32.1	31.8	4.3	270	32.0	32.0	0.1	249	8.9	8.3	3.2
22	315	1.7	1.2	-1.2	270	1.6	1.6	0.0	277	10.8	10.7	-1.4	273	18.7	18.7	-0.9	267	33.6	33.6	1.8	251	43.9	41.4	14.6	—	—	—	—
23	350	2.2	0.4	-2.2	297	2.9	2.6	-1.3	285	9.8	9.5	-2.6	276	20.8	20.7	-2.1	267	30.6	30.6	1.5	260	37.1	36.6	6.2	257	9.0	8.8	2.0
24	35	3.2	-1.8	-2.6	308	2.3	1.8	-1.4	280	9.7	9.6	-1.7	274	18.3	18.3	-1.2	268	35.6	35.6	1.5	262	39.2	38.8	5.4	228	16.0	11.9	10.7
25	21	2.8	-1.0	-2.6	259	2.1	2.1	0.4	273	8.2	8.2	-0.4	281	19.6	19.3	-3.6	267	27.8	27.8	1.6	273	37.3	37.2	-2.0	282	16.6	16.2	-3.5
26	319	2.1	1.4	-1.6	279	2.4	2.4	-0.4	278	8.6	8.5	-1.2	270	20.5	20.5	0.0	274	35.8	35.7	-2.3	261	41.0	40.4	6.7	—	—	—	—
27	331	2.9	1.4	-2.5	288	2.9	2.8	-0.9	280	9.8	9.7	-1.7	269	20.2	20.2	0.5	273	29.5	29.5	-1.6	251	41.0	38.8	13.3	—	—	—	—
28	323	1.5	0.9	-1.2	291	3.3	3.1	-1.2	276	9.6	9.5	-1.0	278	21.5	21.3	-2.9	261	32.4	32.0	4.8	267	39.0	38.9	2.3	280	26.0	25.6	-4.5
29	304	4.6	3.8	-2.6	289	3.6	3.4	-1.2	282	11.2	10.9	-2.4	283	21.7	21.1	-5.0	274	31.7	31.6	-2.0	274	31.5	31.4	-2.4	285	32.0	30.9	-8.3
30	264	3.0	3.0	0.3	264	3.8	3.8	0.4	274	11.1	11.1	-0.7	286	22.7	21.8	-6.4	281	37.5	36.8	-7.3	264	37.8	37.6	4.0	275	35.9	35.8	-3.1
31	330	1.6	0.8	-1.4	278	3.0	3.0	-0.4	270	12.6	12.6	0.1	280	22.4	22.0	-4.0	271	33.8	33.8	-0.5	260	44.0	43.3	7.6	—	—	—	—

Daily Normals of Upper Air Winds (1971-2000)

BHOPAL

FEBRUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	345	2.7	0.7	-2.6	295	2.3	2.1	-1.0	276	11.8	11.7	-1.3	283	25.4	24.8	-5.5	272	31.6	31.6	-1.0	276	35.3	35.1	-3.5	287	7.0	6.7	-2.0			
2	9	1.8	-0.3	-1.8	317	2.2	1.5	-1.6	273	9.0	9.0	-0.5	273	21.2	21.2	-1.1	278	29.7	29.4	-3.9	272	39.2	39.2	-1.3	—	—	—	—			
3	6	2.8	-0.3	-2.8	318	2.5	1.7	-1.9	285	8.6	8.3	-2.3	290	20.6	19.4	-6.9	285	26.3	25.4	-7.0	293	29.8	27.4	-11.7	289	19.0	18.0	-6.2			
4	327	2.0	1.1	-1.7	286	3.5	3.4	-1.0	285	11.4	11.0	-3.0	280	23.5	23.1	-4.1	282	36.6	35.8	-7.4	286	34.9	33.6	-9.5	283	19.0	18.5	-4.3			
5	2	2.3	-0.1	-2.3	282	3.4	3.3	-0.7	282	10.0	9.8	-2.1	285	17.8	17.2	-4.7	277	30.4	30.1	-3.9	278	39.2	38.8	-5.6	—	—	—	—			
6	16	1.8	-0.5	-1.7	306	1.4	1.1	-0.8	275	7.8	7.8	-0.7	281	15.8	15.5	-2.9	274	32.3	32.2	-2.5	281	38.1	37.4	-7.3	287	26.8	25.6	-7.8			
7	132	1.2	-0.9	0.8	288	0.6	0.6	-0.2	294	7.7	7.1	-3.1	279	17.3	17.1	-2.8	268	32.4	32.4	1.3	290	24.9	23.4	-8.6	326	6.6	3.7	-5.5			
8	270	1.6	1.6	0.0	261	2.6	2.6	0.4	267	9.6	9.6	0.5	273	18.5	18.5	-1.0	266	30.4	30.3	2.3	271	35.3	35.3	-0.9	279	17.0	16.8	-2.7			
9	341	2.1	0.7	-2.0	293	2.5	2.3	-1.0	279	8.0	7.9	-1.2	293	17.6	16.2	-6.9	289	21.2	20.0	-6.9	281	25.5	25.0	-5.0	261	6.5	6.4	1.0			
10	352	1.4	0.2	-1.4	270	2.8	2.8	0.0	271	9.1	9.1	-0.2	276	19.8	19.7	-2.2	276	31.4	31.2	-3.5	273	25.8	25.8	-1.2	223	13.0	8.9	9.5			
11	330	1.6	0.8	-1.4	281	2.5	2.5	-0.5	271	8.7	8.7	-0.1	276	19.5	19.4	-2.0	281	30.6	30.1	-5.7	280	37.2	36.7	-6.2	250	11.0	10.3	3.8			
12	358	2.5	0.1	-2.5	301	2.6	2.2	-1.3	268	7.0	7.0	0.2	272	19.0	19.0	-0.5	273	31.3	31.2	-1.8	285	45.6	44.1	-11.7	—	—	—	—			
13	360	0.8	0.0	-0.8	249	2.5	2.3	0.9	254	9.8	9.4	2.7	262	21.8	21.6	3.0	267	33.2	33.2	1.5	254	36.8	35.3	10.4	244	31.0	27.9	13.6			
14	279	2.0	2.0	-0.3	264	4.0	4.0	0.4	254	10.4	10.0	2.9	266	23.3	23.2	1.6	268	39.1	39.1	1.3	247	40.9	37.5	16.3	276	16.0	15.9	-1.7			
15	301	2.3	2.0	-1.2	286	3.3	3.2	-0.9	266	10.2	10.2	0.7	274	24.9	24.8	-1.7	279	43.7	43.2	-6.6	268	33.4	33.4	1.3	281	20.0	19.6	-3.8			
16	295	4.0	3.6	-1.7	276	4.6	4.6	-0.5	260	11.6	11.4	2.1	275	22.8	22.7	-1.8	271	39.5	39.5	-0.6	265	56.5	56.3	5.1	264	15.0	14.9	1.6			
17	298	3.0	2.6	-1.4	274	3.2	3.2	-0.2	266	11.0	11.0	0.8	265	24.8	24.7	2.3	270	36.5	36.5	-0.3	269	38.9	38.9	0.7	259	40.9	40.2	7.8			
18	280	2.7	2.7	-0.5	286	3.2	3.1	-0.9	272	11.0	11.0	-0.3	273	22.5	22.5	-1.3	273	40.8	40.7	-2.1	268	40.1	40.1	1.3	264	39.0	38.8	4.1			
19	315	1.4	1.0	-1.0	263	3.3	3.3	0.4	275	11.1	11.1	-0.9	268	22.3	22.3	0.6	278	41.4	40.9	-6.1	260	37.1	36.6	6.2	271	28.0	28.0	-0.5			
20	310	1.7	1.3	-1.1	259	3.1	3.0	0.6	267	10.3	10.3	0.6	274	24.4	24.4	-1.5	279	45.0	44.4	-7.2	274	35.6	35.5	-2.3	267	14.0	14.0	0.7			
21	307	3.9	3.1	-2.3	277	3.9	3.9	-0.5	275	8.6	8.6	-0.7	280	23.4	23.1	-3.9	280	42.3	41.6	-7.5	293	65.0	59.8	-25.4	—	—	—	—			
22	340	2.9	1.0	-2.7	309	2.8	2.2	-1.8	285	7.2	6.9	-1.9	283	22.6	22.0	-5.2	286	35.0	33.7	-9.6	275	49.9	49.7	-4.0	290	18.0	16.9	-6.2			
23	273	1.7	1.7	-0.1	254	1.8	1.7	0.5	270	7.1	7.1	0.0	280	19.9	19.6	-3.4	273	38.0	37.9	-2.2	281	39.8	39.1	-7.5	299	79.0	69.1	-38.3			
24	231	2.6	2.0	1.6	258	3.8	3.7	0.8	267	10.1	10.1	0.6	270	19.6	19.6	0.0	267	33.7	33.7	1.6	266	37.4	37.3	2.6	—	—	—	—			
25	273	1.9	1.9	-0.1	273	3.5	3.5	-0.2	268	10.4	10.4	0.4	272	19.8	19.8	-0.8	268	33.9	33.9	1.4	267	46.1	46.0	2.5	272	22.7	22.7	-0.9			
26	307	3.8	3.0	-2.3	297	3.6	3.2	-1.6	271	11.3	11.3	-0.2	279	19.9	19.6	-3.2	271	36.9	36.9	-0.9	281	38.0	37.3	-7.1	—	—	—	—			
27	291	3.1	2.9	-1.1	288	3.9	3.7	-1.2	273	9.1	9.1	-0.4	280	19.7	19.4	-3.3	271	36.4	36.4	-0.7	278	39.0	38.6	-5.5	258	24.8	24.3	5.1			
28	299	2.1	1.8	-1.0	282	3.4	3.3	-0.7	274	10.2	10.2	-0.8	278	18.2	18.0	-2.6	268	36.0	36.0	1.0	269	30.2	30.2	0.6	285	14.0	13.5	-3.6			
29	270	3.6	3.6	0.0	262	4.8	4.7	0.7	267	8.1	8.1	0.4	275	22.5	22.4	-2.0	261	25.0	24.7	3.9	246	39.0	35.6	15.9	—	—	—	—			

Daily Normals of Upper Air Winds (1971-2000)

BHOPAL

MARCH

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	289	2.1	2.0	-0.7	289	3.7	3.5	-1.2	272	9.7	9.7	-0.4	277	18.6	18.4	-2.4	268	34.3	34.3	1.2	246	30.2	27.7	12.1	—	—	—	—			
2	349	3.3	0.6	-3.2	304	5.0	4.2	-2.8	271	7.4	7.4	-0.1	272	16.7	16.7	-0.7	268	34.6	34.6	1.2	276	34.6	34.4	-3.7	294	14.0	12.8	-5.7			
3	321	1.4	0.9	-1.1	305	2.8	2.3	-1.6	281	8.4	8.2	-1.6	282	19.0	18.6	-3.8	266	32.2	32.1	2.5	261	40.2	39.7	6.1	249	11.0	10.3	3.9			
4	272	3.1	3.1	-0.1	273	3.6	3.6	-0.2	264	7.2	7.2	0.8	271	19.5	19.5	-0.2	266	33.3	33.2	2.3	268	29.7	29.7	0.8	—	—	—	—			
5	272	2.8	2.8	-0.1	277	3.1	3.1	-0.4	272	7.3	7.3	-0.3	273	20.2	20.2	-1.2	271	32.3	32.3	-0.5	283	37.5	36.5	-8.4	266	22.5	22.4	1.6			
6	305	3.5	2.9	-2.0	278	2.9	2.9	-0.4	267	7.8	7.8	0.4	276	16.7	16.6	-1.8	281	30.3	29.7	-5.8	291	37.5	34.9	-13.7	—	—	—	—			
7	288	3.3	3.1	-1.0	288	3.8	3.6	-1.2	270	8.2	8.2	0.0	283	14.9	14.5	-3.3	275	30.0	29.9	-2.8	282	34.2	33.5	-6.9	282	25.0	24.5	-5.2			
8	302	3.2	2.7	-1.7	279	3.2	3.2	-0.5	279	6.9	6.8	-1.1	277	14.8	14.7	-1.7	284	25.0	24.3	-5.9	278	30.3	30.0	-4.0	282	24.8	24.3	-5.0			
9	284	2.9	2.8	-0.7	270	4.2	4.2	0.0	268	7.6	7.6	0.2	278	16.7	16.5	-2.4	278	24.4	24.1	-3.5	266	35.0	34.9	2.2	—	—	—	—			
10	298	3.0	2.6	-1.4	265	3.6	3.6	0.3	266	7.8	7.8	0.6	274	18.9	18.9	-1.3	272	26.1	26.1	-0.9	269	28.5	28.5	0.7	—	—	—	—			
11	284	4.6	4.5	-1.1	274	5.9	5.9	-0.4	264	8.9	8.8	1.0	275	17.5	17.4	-1.5	282	29.7	29.1	-6.0	274	33.0	32.9	-2.4	—	—	—	—			
12	280	5.8	5.7	-1.0	286	6.0	5.8	-1.7	276	9.4	9.3	-1.0	284	16.5	16.0	-4.1	281	30.7	30.2	-5.6	294	34.7	31.6	-14.4	268	14.0	14.0	0.5			
13	274	5.3	5.3	-0.4	272	6.1	6.1	-0.2	266	9.7	9.7	0.7	275	20.0	19.9	-1.9	282	36.2	35.4	-7.8	287	34.2	32.6	-10.2	275	37.0	36.9	-3.2			
14	278	4.4	4.4	-0.6	274	4.0	4.0	-0.3	270	7.4	7.4	0.0	283	18.5	18.0	-4.2	284	27.6	26.8	-6.6	283	36.7	35.7	-8.3	266	25.0	24.9	1.7			
15	277	1.6	1.6	-0.2	283	2.6	2.5	-0.6	273	7.3	7.3	-0.4	288	18.7	17.8	-5.8	281	29.8	29.3	-5.5	269	33.5	33.5	0.5	272	25.0	25.0	-0.9			
16	302	1.5	1.3	-0.8	286	3.2	3.1	-0.9	279	6.1	6.0	-0.9	271	16.4	16.4	-0.2	271	32.5	32.5	-0.4	275	38.9	38.8	-3.4	277	27.0	26.8	-3.3			
17	292	2.7	2.5	-1.0	276	5.0	5.0	-0.5	274	8.8	8.8	-0.6	266	19.5	19.5	1.3	271	30.3	30.3	-0.4	273	38.5	38.5	-1.9	273	18.9	18.9	-0.9			
18	291	6.0	5.6	-2.2	282	5.6	5.5	-1.2	271	7.3	7.3	-0.1	282	19.1	18.7	-4.0	273	33.1	33.1	-1.5	289	31.4	29.7	-10.1	293	21.0	19.3	-8.2			
19	280	5.1	5.0	-0.9	280	6.5	6.4	-1.1	271	9.0	9.0	-0.2	271	19.9	19.9	-0.2	282	32.4	31.7	-6.8	289	31.8	30.0	-10.4	296	18.0	16.2	-7.9			
20	287	5.0	4.8	-1.5	279	6.0	5.9	-0.9	272	10.0	10.0	-0.4	278	19.4	19.2	-2.7	273	29.1	29.1	-1.6	288	35.2	33.4	-11.0	307	19.0	15.2	-11.4			
21	264	5.1	5.1	0.5	274	6.1	6.1	-0.4	264	10.0	9.9	1.0	270	18.1	18.1	0.0	270	26.1	26.1	-0.2	273	30.4	30.4	-1.5	—	—	—	—			
22	264	3.8	3.8	0.4	274	6.2	6.2	-0.4	265	9.6	9.6	0.9	277	20.0	19.9	-2.3	278	31.9	31.6	-4.7	280	27.0	26.6	-4.8	—	—	—	—			
23	299	4.8	4.2	-2.3	286	6.3	6.1	-1.7	263	10.2	10.1	1.2	274	19.9	19.9	-1.3	275	26.6	26.5	-2.2	264	28.1	28.0	2.8	274	25.0	24.9	-1.7			
24	302	1.9	1.6	-1.0	281	3.3	3.2	-0.6	281	5.9	5.8	-1.1	271	16.9	16.9	-0.3	271	26.4	26.4	-0.4	272	36.3	36.3	-1.1	261	18.0	17.8	2.8			
25	245	1.4	1.3	0.6	280	3.4	3.3	-0.6	283	6.3	6.1	-1.4	274	15.5	15.5	-1.2	270	25.9	25.9	0.0	297	39.2	34.9	-17.8	280	41.0	40.4	-7.1			
26	290	4.8	4.5	-1.6	287	4.1	3.9	-1.2	272	7.4	7.4	-0.2	274	16.8	16.7	-1.3	282	27.5	26.9	-5.9	278	30.5	30.2	-4.3	273	29.4	29.4	-1.6			
27	339	2.6	0.9	-2.4	295	5.1	4.6	-2.1	280	7.8	7.7	-1.3	283	13.9	13.5	-3.1	277	23.5	23.3	-2.8	298	37.9	33.6	-17.5	—	—	—	—			
28	290	2.7	2.5	-0.9	301	3.5	3.0	-1.8	285	6.1	5.9	-1.6	276	16.0	15.9	-1.6	278	29.4	29.1	-4.1	274	32.2	32.1	-2.0	291	18.9	17.6	-6.9			
29	284	3.4	3.3	-0.8	294	4.4	4.0	-1.8	277	5.8	5.8	-0.7	280	14.8	14.6	-2.7	272	30.7	30.7	-0.9	297	25.4	22.7	-11.5	—	—	—	—			
30	295	4.4	4.0	-1.9	289	3.7	3.5	-1.2	278	6.9	6.8	-0.9	277	14.5	14.4	-1.8	281	23.6	23.2	-4.3	288	36.6	34.8	-11.3	296	36.0	32.4	-15.8			
31	294	4.9	4.5	-2.0	287	4.7	4.5	-1.4	271	5.8	5.8	-0.1	268	16.7	16.7	0.7	260	30.6	30.1	5.4	266	37.8	37.7	2.6	269	21.6	21.6	0.4			

Daily Normals of Upper Air Winds (1971-2000)

BHOPAL

APRIL

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	296	3.2	2.9	-1.4	294	3.5	3.2	-1.4	273	4.3	4.3	-0.2	270	15.8	15.8	0.0	268	30.2	30.2	1.1	265	35.8	35.6	3.4	272	21.0	21.0	-0.7
2	303	2.4	2.0	-1.3	275	3.7	3.7	-0.3	256	6.4	6.2	1.5	271	17.1	17.1	-0.2	272	31.8	31.8	-1.0	282	32.3	31.6	-6.9	288	28.0	26.6	-8.7
3	225	3.5	2.5	2.5	275	5.0	5.0	-0.4	260	7.3	7.2	1.3	273	16.3	16.3	-0.8	262	29.8	29.5	4.2	275	41.5	41.3	-3.6	—	—	—	—
4	292	3.8	3.5	-1.4	275	5.2	5.2	-0.5	263	8.5	8.4	1.0	270	15.7	15.7	0.0	268	25.5	25.5	1.0	262	44.2	43.8	5.8	269	40.0	40.0	0.7
5	277	5.5	5.5	-0.7	279	6.1	6.0	-0.9	269	6.6	6.6	0.1	277	13.1	13.0	-1.6	278	27.2	26.9	-3.7	287	36.1	34.5	-10.5	—	—	—	—
6	288	7.9	7.5	-2.4	295	6.5	5.9	-2.7	282	6.7	6.6	-1.4	276	11.8	11.7	-1.2	290	24.7	23.2	-8.6	295	41.0	37.2	-17.3	—	—	—	—
7	281	5.9	5.8	-1.1	284	6.4	6.2	-1.5	273	6.7	6.7	-0.3	274	14.7	14.7	-0.9	278	23.3	23.1	-3.4	285	35.0	33.8	-9.0	—	—	—	—
8	276	6.2	6.2	-0.6	277	6.2	6.1	-0.8	268	8.1	8.1	0.3	276	13.4	13.3	-1.5	283	26.1	25.4	-5.8	282	34.2	33.4	-7.4	—	—	—	—
9	279	4.7	4.6	-0.7	277	6.9	6.9	-0.8	269	7.1	7.1	0.1	274	14.3	14.3	-1.0	267	24.9	24.9	1.5	257	29.3	28.6	6.4	—	—	—	—
10	266	3.1	3.1	0.2	285	4.6	4.4	-1.2	268	5.7	5.7	0.2	274	15.1	15.1	-1.1	277	30.6	30.4	-3.5	281	23.2	22.8	-4.4	309	23.0	17.9	-14.5
11	253	3.4	3.2	1.0	276	4.6	4.6	-0.5	271	6.1	6.1	-0.1	275	12.7	12.7	-1.0	269	25.0	25.0	0.3	285	27.0	26.0	-7.2	310	17.0	13.0	-10.9
12	256	4.5	4.4	1.1	271	5.3	5.3	-0.1	275	6.6	6.6	-0.6	274	14.2	14.2	-1.0	267	28.7	28.7	1.3	259	25.9	25.4	4.9	276	22.0	21.9	-2.3
13	265	2.5	2.5	0.2	281	5.7	5.6	-1.1	278	6.6	6.5	-0.9	270	12.7	12.7	0.1	269	25.2	25.2	0.6	251	31.5	29.7	10.4	284	16.9	16.4	-4.0
14	292	4.0	3.7	-1.5	279	4.9	4.8	-0.8	255	7.4	7.2	1.9	270	13.5	13.5	-0.1	264	25.0	24.9	2.5	260	29.8	29.4	5.1	268	9.0	9.0	0.3
15	278	5.3	5.3	-0.7	276	6.2	6.2	-0.7	261	7.3	7.2	1.1	276	13.4	13.3	-1.3	268	21.5	21.5	0.7	250	25.4	23.9	8.7	230	14.5	11.1	9.3
16	285	4.9	4.7	-1.3	284	4.9	4.8	-1.2	270	5.8	5.8	0.0	280	12.7	12.5	-2.3	271	20.6	20.6	-0.3	263	30.5	30.3	3.7	266	23.7	23.6	1.7
17	284	5.5	5.3	-1.3	296	4.6	4.1	-2.0	271	6.3	6.3	-0.1	280	12.1	11.9	-2.1	265	23.0	22.9	2.0	259	21.6	21.2	4.3	268	12.0	12.0	0.4
18	265	4.9	4.9	0.4	289	5.3	5.0	-1.7	278	6.2	6.1	-0.9	282	11.7	11.4	-2.5	260	20.7	20.4	3.7	260	18.9	18.6	3.3	254	13.0	12.5	3.6
19	267	4.2	4.2	0.2	291	4.4	4.1	-1.6	277	5.4	5.4	-0.7	282	10.8	10.6	-2.2	265	20.0	19.9	1.9	275	18.7	18.6	-1.7	—	—	—	—
20	262	5.8	5.7	0.8	286	5.8	5.6	-1.6	286	5.2	5.0	-1.4	279	10.8	10.7	-1.7	275	20.1	20.0	-1.6	258	20.0	19.6	4.1	277	11.0	10.9	-1.3
21	273	5.3	5.3	-0.3	286	5.0	4.8	-1.4	276	5.7	5.7	-0.6	273	10.4	10.4	-0.6	272	21.1	21.1	-0.8	266	25.8	25.7	2.0	267	11.0	11.0	0.6
22	269	5.6	5.6	0.1	282	5.4	5.3	-1.1	281	5.2	5.1	-1.0	277	9.9	9.8	-1.2	267	19.8	19.8	0.9	272	29.9	29.9	-1.2	280	18.0	17.7	-3.1
23	283	5.7	5.6	-1.3	280	6.2	6.1	-1.1	279	5.9	5.8	-0.9	280	8.4	8.3	-1.4	279	17.5	17.3	-2.6	273	24.9	24.9	-1.4	5	8.0	-0.7	-8.0
24	285	6.3	6.1	-1.6	284	6.1	5.9	-1.5	292	5.5	5.1	-2.1	283	7.8	7.6	-1.8	281	19.0	18.6	-3.7	289	36.0	34.0	-11.7	261	8.9	8.8	1.4
25	277	6.5	6.5	-0.8	286	4.6	4.4	-1.3	286	5.7	5.5	-1.6	299	6.8	5.9	-3.3	272	17.3	17.3	-0.7	262	30.1	29.8	4.3	279	13.7	13.5	-2.2
26	274	5.8	5.8	-0.4	286	4.8	4.6	-1.3	293	5.6	5.2	-2.2	296	7.2	6.5	-3.2	286	17.9	17.2	-4.8	274	22.0	21.9	-1.6	301	12.8	11.0	-6.5
27	301	5.7	4.9	-2.9	290	5.3	5.0	-1.8	280	6.1	6.0	-1.1	294	9.4	8.6	-3.8	267	19.6	19.6	0.9	256	24.0	23.3	5.6	284	12.1	11.7	-3.0
28	305	5.1	4.2	-2.9	300	4.6	4.0	-2.3	301	5.5	4.7	-2.8	309	8.9	6.9	-5.6	288	18.2	17.3	-5.6	283	20.1	19.6	-4.4	234	6.0	4.9	3.5
29	305	4.7	3.9	-2.7	294	4.9	4.5	-2.0	300	4.3	3.7	-2.1	297	8.1	7.2	-3.7	287	17.7	16.9	-5.2	277	22.5	22.3	-2.7	294	24.6	22.5	-10.0
30	242	3.2	2.8	1.5	270	5.0	5.0	0.0	280	6.2	6.1	-1.1	291	9.0	8.4	-3.2	290	20.1	18.9	-6.7	277	26.8	26.6	-3.2	257	10.1	9.8	2.3

Daily Normals of Upper Air Winds (1971-2000)

65

BHOPAL

MAY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	265	6.6	6.6	0.6	275	6.0	6.0	-0.5	271	5.7	5.7	-0.1	280	10.3	10.1	-1.8	282	20.7	20.2	-4.3	269	25.9	25.9	0.4	156	9.0	-3.7	8.2			
2	273	4.4	4.4	-0.2	285	5.1	4.9	-1.3	276	5.9	5.9	-0.6	277	9.1	9.0	-1.1	288	17.8	17.0	-5.4	260	25.2	24.8	4.3	—	—	—	—			
3	264	4.9	4.9	0.5	282	4.8	4.7	-1.0	283	6.5	6.3	-1.5	280	8.7	8.6	-1.5	256	25.9	25.1	6.3	270	19.0	19.0	0.0	—	—	—	—			
4	278	4.5	4.5	-0.6	292	5.0	4.6	-1.9	278	4.9	4.9	-0.7	295	8.8	8.0	-3.7	278	18.2	18.0	-2.6	264	22.7	22.6	2.5	257	12.8	12.5	2.9			
5	299	6.5	5.7	-3.2	301	6.6	5.7	-3.4	297	5.6	5.0	-2.6	301	8.0	6.9	-4.1	267	17.1	17.1	1.0	292	17.4	16.1	-6.6	239	15.0	12.9	7.7			
6	318	7.6	5.1	-5.6	299	6.4	5.6	-3.1	296	6.2	5.6	-2.7	303	7.3	6.1	-4.0	288	16.1	15.3	-5.0	264	28.2	28.0	3.1	292	22.8	21.1	-8.7			
7	291	5.8	5.4	-2.1	290	6.5	6.1	-2.2	288	5.4	5.1	-1.7	292	5.8	5.4	-2.2	262	15.8	15.6	2.3	274	23.5	23.4	-1.8	216	5.8	3.4	4.7			
8	269	5.5	5.5	0.1	281	5.1	5.0	-1.0	287	5.7	5.4	-1.7	289	7.9	7.5	-2.6	268	18.7	18.7	0.8	266	21.3	21.2	1.5	238	14.0	11.9	7.4			
9	261	6.1	6.0	1.0	286	6.0	5.8	-1.7	292	6.5	6.0	-2.4	290	11.0	10.4	-3.7	284	18.7	18.2	-4.4	268	20.8	20.8	0.9	99	0.6	-0.6	0.1			
10	279	2.5	2.5	-0.4	279	5.3	5.2	-0.8	293	5.1	4.7	-2.0	289	9.1	8.6	-2.9	279	18.8	18.6	-2.9	254	24.2	23.2	6.8	237	6.9	5.8	3.8			
11	315	3.8	2.7	-2.7	301	4.3	3.7	-2.2	299	4.5	3.9	-2.2	288	9.2	8.8	-2.8	279	13.9	13.7	-2.2	277	17.9	17.8	-2.2	296	11.1	10.0	-4.8			
12	248	4.2	3.9	1.6	292	3.5	3.3	-1.3	292	4.3	4.0	-1.6	302	6.8	5.8	-3.6	278	15.5	15.4	-2.1	290	16.4	15.4	-5.7	298	14.4	12.7	-6.7			
13	296	3.7	3.3	-1.6	305	4.5	3.7	-2.6	305	5.2	4.3	-3.0	302	8.2	7.0	-4.3	269	15.0	15.0	0.2	263	16.5	16.4	2.1	222	6.4	4.3	4.8			
14	288	2.9	2.8	-0.9	301	4.5	3.9	-2.3	292	5.3	4.9	-2.0	290	8.1	7.6	-2.7	264	13.6	13.5	1.5	262	17.8	17.6	2.5	40	1.7	-1.1	-1.3			
15	284	4.9	4.7	-1.2	288	5.6	5.3	-1.7	305	5.5	4.5	-3.1	293	7.0	6.5	-2.7	256	15.6	15.1	3.8	248	19.3	17.9	7.2	240	7.4	6.4	3.7			
16	293	5.3	4.9	-2.1	298	7.8	6.9	-3.7	300	6.8	5.9	-3.4	303	6.1	5.1	-3.3	281	14.4	14.1	-2.8	256	16.8	16.3	4.2	212	8.0	4.2	6.8			
17	271	4.9	4.9	-0.1	295	7.1	6.4	-3.0	301	6.4	5.5	-3.3	302	8.6	7.3	-4.5	286	16.8	16.2	-4.6	265	18.2	18.1	1.7	276	8.5	8.5	-0.9			
18	294	3.5	3.2	-1.4	290	6.5	6.1	-2.2	289	6.5	6.2	-2.1	289	8.7	8.2	-2.8	281	15.5	15.2	-2.9	257	14.0	13.7	3.1	219	6.5	4.1	5.0			
19	283	6.6	6.4	-1.5	283	7.0	6.8	-1.6	284	4.9	4.8	-1.2	286	8.4	8.1	-2.3	280	10.2	10.0	-1.8	249	13.1	12.3	4.6	87	3.7	-3.7	-0.2			
20	279	5.8	5.7	-0.9	296	6.0	5.4	-2.6	301	5.7	4.9	-2.9	301	9.0	7.7	-4.6	269	8.7	8.7	0.2	249	12.0	11.2	4.4	207	2.9	1.3	2.6			
21	307	5.0	4.0	-3.0	300	5.8	5.0	-2.9	305	5.7	4.7	-3.3	306	6.9	5.6	-4.0	283	9.6	9.4	-2.1	251	9.2	8.7	3.0	356	2.7	0.2	-2.7			
22	298	5.1	4.5	-2.4	296	4.8	4.3	-2.1	292	5.0	4.6	-1.9	313	7.7	5.6	-5.3	266	8.6	8.6	0.6	233	14.6	11.6	8.8	115	5.9	-5.3	2.5			
23	285	4.9	4.7	-1.3	304	6.2	5.1	-3.5	298	6.4	5.6	-3.0	313	6.7	4.9	-4.6	280	8.6	8.5	-1.5	264	11.0	10.9	1.1	211	5.0	2.6	4.3			
24	281	6.1	6.0	-1.2	312	6.6	4.9	-4.4	311	6.6	5.0	-4.3	310	6.0	4.6	-3.8	269	8.5	8.5	0.1	241	13.1	11.5	6.3	121	3.5	-3.0	1.8			
25	275	5.3	5.3	-0.5	289	5.4	5.1	-1.8	307	6.1	4.9	-3.7	331	6.8	3.3	-5.9	292	6.7	6.2	-2.5	273	10.6	10.6	-0.5	63	1.1	-1.0	-0.5			
26	284	5.7	5.5	-1.4	289	4.6	4.3	-1.5	312	5.7	4.2	-3.8	328	5.5	2.9	-4.7	282	7.5	7.3	-1.5	253	7.3	7.0	2.2	121	6.9	-5.9	3.6			
27	298	4.2	3.7	-2.0	298	5.8	5.1	-2.7	305	4.7	3.9	-2.7	313	4.9	3.6	-3.3	275	8.7	8.7	-0.8	248	11.4	10.6	4.3	312	8.0	5.9	-5.4			
28	273	6.3	6.3	-0.3	288	6.6	6.3	-2.1	295	5.0	4.5	-2.1	316	6.2	4.3	-4.4	272	11.3	11.3	-0.4	257	15.0	14.6	3.3	210	6.7	3.4	5.8			
29	258	5.5	5.4	1.1	283	5.1	5.0	-1.2	287	5.2	5.0	-1.5	291	7.0	6.5	-2.5	265	10.8	10.8	1.0	255	12.2	11.8	3.2	69	5.8	-5.4	-2.1			
30	270	4.4	4.4	0.0	288	4.2	4.0	-1.3	297	3.0	2.7	-1.4	316	5.6	3.9	-4.0	268	11.6	11.6	0.5	253	13.7	13.1	3.9	112	11.2	-10.4	4.1			
31	287	3.4	3.3	-1.0	294	3.2	2.9	-1.3	293	3.8	3.5	-1.5	280	6.9	6.8	-1.2	261	8.0	7.9	1.2	227	12.2	9.0	8.3	157	3.6	-1.4	3.3			

Daily Normals of Upper Air Winds (1971-2000)

BHOPAL

JUNE

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	276	5.6	5.6	-0.6	290	5.3	5.0	-1.8	299	5.2	4.6	-2.5	288	6.6	6.3	-2.0	264	9.0	9.0	0.9	253	7.7	7.4	2.2	204	3.0	1.2	2.7
2	238	4.9	4.2	2.6	294	5.5	5.0	-2.2	306	5.4	4.4	-3.2	295	5.0	4.5	-2.1	270	8.2	8.2	0.0	245	7.8	7.1	3.3	119	8.5	-7.5	4.1
3	290	5.4	5.1	-1.9	308	6.1	4.8	-3.8	305	4.4	3.6	-2.5	309	4.6	3.6	-2.9	249	8.5	7.9	3.1	224	8.1	5.6	5.8	139	5.7	-3.8	4.3
4	286	4.0	3.8	-1.1	305	5.4	4.4	-3.1	312	4.7	3.5	-3.1	310	4.3	3.3	-2.8	262	7.1	7.0	1.0	241	9.0	7.8	4.4	95	6.4	-6.4	0.6
5	273	1.9	1.9	-0.1	304	3.6	3.0	-2.0	314	4.0	2.9	-2.8	316	5.3	3.7	-3.8	260	6.9	6.8	1.2	222	7.6	5.1	5.7	101	12.0	-11.8	2.3
6	284	3.7	3.6	-0.9	292	3.1	2.9	-1.2	325	4.7	2.7	-3.9	307	4.1	3.3	-2.5	263	7.9	7.8	1.0	225	5.7	4.0	4.0	84	8.1	-8.1	-0.9
7	244	6.4	5.7	2.8	275	4.3	4.3	-0.4	297	1.3	1.2	-0.6	282	4.2	4.1	-0.9	260	7.7	7.6	1.3	243	4.9	4.4	2.2	88	9.7	-9.7	-0.3
8	298	5.5	4.8	-2.6	287	3.4	3.2	-1.0	308	4.3	3.4	-2.7	286	6.0	5.8	-1.7	262	5.1	5.1	0.7	150	2.8	-1.4	2.4	101	7.1	-7.0	1.4
9	224	3.7	2.6	2.7	270	1.9	1.9	0.0	292	2.7	2.5	-1.0	304	1.8	1.5	-1.0	241	2.5	2.2	1.2	240	2.4	2.1	1.2	109	9.0	-8.5	3.0
10	256	5.3	5.1	1.3	306	3.9	3.2	-2.3	328	3.1	1.6	-2.6	311	3.8	2.9	-2.5	347	0.9	0.2	-0.9	77	0.9	-0.9	-0.2	95	9.7	-9.7	0.9
11	275	4.4	4.4	-0.4	298	4.3	3.8	-2.0	325	4.7	2.7	-3.9	336	3.7	1.5	-3.4	259	1.6	1.6	0.3	105	2.3	-2.2	0.6	94	9.2	-9.2	0.6
12	275	5.2	5.2	-0.5	291	4.5	4.2	-1.6	329	3.9	2.0	-3.3	281	3.7	3.6	-0.7	250	2.7	2.5	0.9	144	3.2	-1.9	2.6	100	12.6	-12.4	2.1
13	329	3.5	1.8	-3.0	300	4.3	3.7	-2.1	336	3.0	1.2	-2.7	247	1.3	1.2	0.5	246	2.0	1.8	0.8	159	3.0	-1.1	2.8	122	11.1	-9.4	5.9
14	276	1.8	1.8	-0.2	308	3.6	2.8	-2.2	339	2.6	0.9	-2.4	281	1.6	1.6	-0.3	73	1.4	-1.3	-0.4	103	4.8	-4.7	1.1	105	9.9	-9.6	2.5
15	222	1.3	0.9	1.0	315	3.0	2.1	-2.1	9	3.1	-0.5	-3.1	330	1.4	0.7	-1.2	121	1.7	-1.5	0.9	121	6.1	-5.2	3.1	90	12.0	-12.0	-0.1
16	279	3.1	3.1	-0.5	294	4.2	3.8	-1.7	327	2.7	1.5	-2.3	314	2.9	2.1	-2.0	132	1.5	-1.1	1.0	86	4.5	-4.5	-0.3	114	14.7	-13.4	6.0
17	268	6.7	6.7	0.2	287	5.0	4.8	-1.5	349	4.8	0.9	-4.7	327	2.7	1.5	-2.3	29	1.3	-0.6	-1.1	88	4.7	-4.7	-0.2	98	12.8	-12.7	1.7
18	256	2.9	2.8	0.7	304	3.7	3.1	-2.1	350	3.9	0.7	-3.8	280	2.2	2.2	-0.4	247	2.3	2.1	0.9	118	4.7	-4.2	2.2	93	7.1	-7.1	0.4
19	333	0.4	0.2	-0.4	299	2.9	2.5	-1.4	356	4.0	0.3	-4.0	272	2.5	2.5	-0.1	123	1.7	-1.4	0.9	159	2.6	-0.9	2.4	81	11.5	-11.4	-1.8
20	258	3.8	3.7	0.8	278	4.9	4.8	-0.7	324	3.4	2.0	-2.8	351	1.9	0.3	-1.9	90	1.7	-1.7	0.0	119	9.1	-8.0	4.4	94	14.9	-14.9	1.1
21	265	7.3	7.3	0.7	293	7.3	6.7	-2.8	326	4.6	2.6	-3.8	320	0.8	0.5	-0.6	109	3.7	-3.5	1.2	112	10.9	-10.1	4.0	105	16.3	-15.7	4.3
22	257	7.2	7.0	1.6	287	6.6	6.3	-1.9	344	3.7	1.0	-3.6	14	2.5	-0.6	-2.4	104	4.5	-4.4	1.1	102	9.0	-8.8	1.8	98	18.5	-18.3	2.7
23	258	5.2	5.1	1.1	287	7.0	6.7	-2.0	325	6.2	3.6	-5.1	317	3.4	2.3	-2.5	92	2.5	-2.5	0.1	122	7.1	-6.0	3.8	91	15.7	-15.7	0.3
24	252	7.9	7.5	2.5	284	6.3	6.1	-1.5	325	4.0	2.3	-3.3	357	4.2	0.2	-4.2	86	2.6	-2.6	-0.2	110	8.0	-7.5	2.7	90	13.4	-13.4	-0.1
25	257	9.8	9.6	2.2	279	9.6	9.5	-1.5	318	3.9	2.6	-2.9	353	4.3	0.5	-4.3	61	4.1	-3.6	-2.0	91	9.4	-9.4	0.1	86	17.2	-17.2	-1.1
26	269	8.3	8.3	0.1	281	6.7	6.6	-1.3	314	5.4	3.9	-3.8	9	4.0	-0.6	-4.0	75	4.7	-4.5	-1.2	98	9.9	-9.8	1.4	91	16.7	-16.7	0.4
27	281	5.7	5.6	-1.1	308	5.8	4.6	-3.6	1	5.2	-0.1	-5.2	11	3.2	-0.6	-3.1	86	5.1	-5.1	-0.4	109	13.2	-12.5	4.3	97	23.7	-23.5	2.8
28	249	5.1	4.8	1.8	297	4.7	4.2	-2.1	360	4.1	0.0	-4.1	347	2.8	0.6	-2.7	99	6.7	-6.6	1.1	100	14.3	-14.1	2.6	68	20.9	-19.4	-7.9
29	236	4.1	3.4	2.3	265	5.2	5.2	0.5	292	3.5	3.2	-1.3	276	2.0	2.0	-0.2	95	5.9	-5.9	0.5	71	8.8	-8.3	-2.8	80	24.8	-24.4	-4.3
30	236	5.0	4.1	2.8	261	6.1	6.0	1.0	291	3.3	3.1	-1.2	312	1.3	1.0	-0.9	114	5.1	-4.7	2.1	98	14.0	-13.9	2.0	87	22.2	-22.2	-1.2

Daily Normals of Upper Air Winds (1971-2000)

BHOPAL

JULY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	241	4.1	3.6	2.0	270	5.8	5.8	0.0	306	2.7	2.2	-1.6	265	1.1	1.1	0.1	112	6.1	-5.7	2.3	95	13.4	-13.3	1.2	76	27.2	-26.3	-6.8
2	259	4.6	4.5	0.9	259	6.5	6.4	1.2	281	3.2	3.1	-0.6	308	1.1	0.9	-0.7	92	5.7	-5.7	0.2	91	12.8	-12.8	0.2	84	21.7	-21.6	-2.3
3	282	3.9	3.8	-0.8	287	5.8	5.5	-1.7	295	2.9	2.6	-1.2	80	1.1	-1.1	-0.2	95	6.7	-6.7	0.6	99	13.2	-13.0	2.0	86	22.5	-22.4	-1.6
4	237	4.0	3.4	2.2	267	5.5	5.5	0.3	307	4.1	3.3	-2.5	7	1.6	-0.2	-1.6	94	4.5	-4.5	0.3	103	12.6	-12.3	2.9	77	18.9	-18.4	-4.4
5	259	6.0	5.9	1.1	269	8.5	8.5	0.1	287	4.4	4.2	-1.3	10	1.7	-0.3	-1.7	84	5.1	-5.1	-0.5	98	13.5	-13.4	2.0	81	29.5	-29.1	-4.6
6	270	6.4	6.4	0.0	279	7.1	7.0	-1.1	293	3.6	3.3	-1.4	329	3.5	1.8	-3.0	77	3.7	-3.6	-0.8	109	10.9	-10.3	3.5	88	20.9	-20.9	-0.8
7	267	5.8	5.8	0.3	281	5.9	5.8	-1.1	305	4.2	3.4	-2.4	320	1.6	1.0	-1.2	82	4.4	-4.4	-0.6	93	12.6	-12.6	0.6	79	24.0	-23.6	-4.5
8	249	4.2	3.9	1.5	269	5.2	5.2	0.1	317	3.5	2.4	-2.6	330	0.8	0.4	-0.7	100	6.1	-6.0	1.1	91	16.2	-16.2	0.4	79	28.6	-28.0	-5.6
9	255	6.5	6.3	1.7	267	6.6	6.6	0.3	295	3.8	3.5	-1.6	303	2.0	1.7	-1.1	80	5.0	-4.9	-0.9	92	15.9	-15.9	0.5	75	22.7	-21.9	-6.0
10	248	6.1	5.6	2.3	266	6.7	6.7	0.5	308	3.7	2.9	-2.3	337	2.6	1.0	-2.4	84	4.9	-4.9	-0.5	85	14.7	-14.6	-1.3	73	28.2	-27.0	-8.1
11	271	6.0	6.0	-0.1	280	7.1	7.0	-1.2	310	6.1	4.7	-3.9	325	1.6	0.9	-1.3	90	5.6	-5.6	0.0	87	10.5	-10.5	-0.6	80	23.1	-22.7	-4.1
12	259	6.6	6.5	1.3	279	5.7	5.6	-0.9	315	3.7	2.6	-2.6	356	2.8	0.2	-2.8	74	5.3	-5.1	-1.5	68	11.0	-10.2	-4.1	79	24.4	-23.9	-4.8
13	271	7.2	7.2	-0.1	282	6.6	6.5	-1.4	304	4.3	3.6	-2.4	185	1.2	0.1	1.2	105	5.8	-5.6	1.5	90	11.1	-11.1	0.0	79	23.3	-22.8	-4.6
14	254	7.8	7.5	2.1	261	7.3	7.2	1.2	287	2.4	2.3	-0.7	307	0.5	0.4	-0.3	130	5.1	-3.9	3.3	98	13.2	-13.1	1.8	99	20.8	-20.6	3.1
15	261	5.9	5.8	0.9	282	4.0	3.9	-0.8	315	2.5	1.8	-1.8	119	2.9	-2.5	1.4	94	6.7	-6.7	0.5	93	13.2	-13.2	0.7	73	22.0	-21.0	-6.6
16	255	3.4	3.3	0.9	277	3.3	3.3	-0.4	304	1.4	1.2	-0.8	94	2.9	-2.9	0.2	99	7.4	-7.3	1.2	97	16.6	-16.5	2.1	95	19.5	-19.4	1.7
17	243	3.7	3.3	1.7	265	4.5	4.5	0.4	225	1.0	0.7	0.7	56	1.8	-1.5	-1.0	94	9.8	-9.8	0.7	98	16.5	-16.4	2.2	85	22.0	-21.9	-1.9
18	240	3.4	3.0	1.7	267	3.9	3.9	0.2	270	1.4	1.4	0.0	142	1.1	-0.7	0.9	100	8.3	-8.2	1.4	90	12.5	-12.5	0.0	86	22.9	-22.9	-1.5
19	248	6.5	6.0	2.4	265	6.0	6.0	0.5	261	2.6	2.6	0.4	270	0.2	0.2	0.0	101	5.6	-5.5	1.1	79	16.0	-15.7	-3.1	88	21.5	-21.5	-0.9
20	257	6.2	6.0	1.4	273	8.2	8.2	-0.4	297	4.9	4.4	-2.2	360	2.6	0.0	-2.6	83	8.7	-8.6	-1.0	92	16.9	-16.9	0.5	88	27.6	-27.6	-1.1
21	243	7.4	6.6	3.3	277	7.7	7.6	-0.9	293	4.4	4.1	-1.7	15	3.4	-0.9	-3.3	79	8.6	-8.4	-1.6	82	15.0	-14.9	-2.0	72	29.0	-27.6	-9.0
22	262	6.5	6.4	0.9	275	5.8	5.8	-0.5	309	2.1	1.6	-1.3	78	3.0	-2.9	-0.6	89	10.1	-10.1	-0.2	86	17.8	-17.8	-1.1	78	22.0	-21.5	-4.6
23	267	6.7	6.7	0.4	287	5.2	5.0	-1.5	286	2.2	2.1	-0.6	61	1.8	-1.6	-0.9	87	8.1	-8.1	-0.4	88	18.4	-18.4	-0.5	84	27.4	-27.3	-2.7
24	265	8.1	8.1	0.7	286	8.2	7.9	-2.2	297	5.1	4.5	-2.3	332	1.5	0.7	-1.3	92	9.8	-9.8	0.4	88	16.1	-16.1	-0.7	81	26.0	-25.7	-4.2
25	280	7.7	7.6	-1.4	281	11.8	11.6	-2.3	285	5.4	5.2	-1.4	270	1.6	1.6	0.0	83	7.8	-7.7	-1.0	76	14.1	-13.7	-3.5	82	22.3	-22.1	-3.2
26	254	6.2	6.0	1.7	275	10.1	10.1	-0.9	299	5.2	4.6	-2.5	258	1.9	1.9	0.4	99	7.9	-7.8	1.2	91	15.9	-15.9	0.3	81	31.2	-30.8	-4.9
27	273	4.4	4.4	-0.2	281	6.6	6.5	-1.3	286	4.5	4.3	-1.2	352	0.7	0.1	-0.7	89	8.1	-8.1	-0.1	100	14.5	-14.3	2.5	126	24.0	-19.4	14.1
28	266	6.5	6.5	0.4	288	7.6	7.2	-2.3	309	5.5	4.3	-3.5	34	4.8	-2.7	-4.0	77	11.3	-11.0	-2.6	86	20.2	-20.2	-1.3	—	—	—	—
29	264	6.2	6.2	0.6	281	7.4	7.3	-1.4	314	4.3	3.1	-3.0	63	1.3	-1.2	-0.6	77	8.7	-8.5	-1.9	60	8.6	-7.4	-4.3	88	24.0	-24.0	-0.9
30	248	4.3	4.0	1.6	283	7.2	7.0	-1.6	301	5.5	4.7	-2.8	10	1.1	-0.2	-1.1	91	8.3	-8.3	0.2	79	11.0	-10.8	-2.1	95	18.0	-17.9	1.6
31	236	5.8	4.8	3.2	259	7.6	7.5	1.4	277	4.8	4.8	-0.6	77	1.3	-1.3	-0.3	89	8.5	-8.5	-0.1	87	12.8	-12.8	-0.7	84	28.0	-27.8	-2.9

Daily Normals of Upper Air Winds (1971-2000)

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BHOPAL

AUGUST

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	262	7.2	7.1	1.0	279	7.3	7.2	-1.2	304	4.2	3.5	-2.4	28	1.9	-0.9	-1.7	94	7.7	-7.7	0.6	108	8.5	-8.1	2.7	85	25.1	-25.0	-2.3			
2	269	6.8	6.8	0.1	300	6.2	5.4	-3.1	328	4.5	2.4	-3.8	336	3.4	1.4	-3.1	103	7.2	-7.0	1.6	86	14.7	-14.7	-0.9	79	21.5	-21.1	-4.2			
3	271	5.9	5.9	-0.1	272	7.3	7.3	-0.3	298	4.1	3.6	-1.9	360	1.6	0.0	-1.6	90	6.8	-6.8	0.0	81	14.9	-14.7	-2.4	—	—	—	—			
4	268	7.1	7.1	0.2	275	7.5	7.5	-0.6	288	5.5	5.2	-1.7	297	0.9	0.8	-0.4	99	5.7	-5.6	0.9	81	14.5	-14.3	-2.3	91	24.7	-24.7	0.6			
5	259	8.1	8.0	1.5	275	7.3	7.3	-0.6	292	4.8	4.4	-1.8	360	0.1	0.0	-0.1	91	6.4	-6.4	0.1	90	17.1	-17.1	0.1	79	24.6	-24.1	-4.9			
6	266	7.1	7.1	0.5	293	5.7	5.3	-2.2	325	3.3	1.9	-2.7	60	2.4	-2.1	-1.2	88	6.2	-6.2	-0.2	87	16.2	-16.2	-0.8	74	25.2	-24.2	-7.1			
7	262	9.8	9.7	1.3	288	8.6	8.2	-2.7	303	4.6	3.9	-2.5	49	3.3	-2.5	-2.2	99	10.6	-10.5	1.6	90	17.6	-17.6	0.0	91	28.8	-28.8	0.7			
8	274	8.0	8.0	-0.6	300	6.4	5.5	-3.2	354	2.7	0.3	-2.7	84	5.1	-5.1	-0.5	100	10.0	-9.9	1.7	93	18.4	-18.4	0.9	76	23.1	-22.4	-5.7			
9	271	7.6	7.6	-0.1	293	6.7	6.2	-2.6	360	2.5	0.0	-2.5	63	4.7	-4.2	-2.1	97	12.3	-12.2	1.4	82	16.8	-16.6	-2.3	81	25.6	-25.3	-3.8			
10	268	4.8	4.8	0.2	293	3.4	3.1	-1.3	313	1.8	1.3	-1.2	63	4.2	-3.7	-1.9	102	9.0	-8.8	1.8	91	15.4	-15.4	0.4	83	32.6	-32.4	-3.8			
11	274	4.2	4.2	-0.3	271	4.7	4.7	-0.1	281	2.5	2.5	-0.5	94	1.4	-1.4	0.1	82	7.3	-7.2	-1.0	87	13.7	-13.7	-0.6	89	26.6	-26.6	-0.6			
12	268	5.5	5.5	0.2	278	7.3	7.2	-1.0	273	4.1	4.1	-0.2	17	2.1	-0.6	-2.0	76	8.6	-8.3	-2.1	81	13.7	-13.5	-2.2	81	23.5	-23.2	-3.7			
13	261	7.6	7.5	1.2	287	6.6	6.3	-1.9	302	3.6	3.0	-1.9	18	1.3	-0.4	-1.2	88	5.3	-5.3	-0.2	97	12.0	-11.9	1.4	91	22.1	-22.1	0.3			
14	271	6.5	6.5	-0.1	279	6.8	6.7	-1.1	297	4.2	3.8	-1.9	335	3.3	1.4	-3.0	92	4.6	-4.6	0.2	83	8.0	-7.9	-1.0	90	8.0	-8.0	0.0			
15	269	6.7	6.7	0.1	287	5.4	5.2	-1.6	348	2.4	0.5	-2.3	33	1.7	-0.9	-1.4	97	7.0	-7.0	0.8	99	19.8	-19.6	3.0	92	25.0	-25.0	1.0			
16	270	7.3	7.3	0.0	299	7.5	6.6	-3.6	347	3.5	0.8	-3.4	49	2.8	-2.1	-1.8	81	8.1	-8.0	-1.2	94	19.6	-19.5	1.5	88	20.0	-20.0	-0.6			
17	273	7.3	7.3	-0.4	289	5.9	5.6	-1.9	356	2.6	0.2	-2.6	92	3.3	-3.3	0.1	93	6.6	-6.6	0.4	99	18.4	-18.2	2.9	92	22.6	-22.6	0.6			
18	282	7.2	7.0	-1.5	294	5.9	5.4	-2.4	327	3.1	1.7	-2.6	50	3.1	-2.4	-2.0	98	5.2	-5.2	0.7	80	13.2	-13.0	-2.4	85	21.6	-21.5	-1.9			
19	281	7.0	6.9	-1.3	304	7.8	6.5	-4.4	309	3.2	2.5	-2.0	46	3.6	-2.6	-2.5	82	6.0	-5.9	-0.8	76	12.9	-12.5	-3.2	79	20.6	-20.2	-3.8			
20	278	7.7	7.6	-1.1	284	7.9	7.7	-1.9	297	2.7	2.4	-1.2	93	2.1	-2.1	0.1	94	8.0	-8.0	0.6	89	12.1	-12.1	-0.3	87	21.0	-21.0	-1.1			
21	289	8.4	8.0	-2.7	294	7.1	6.5	-2.9	304	4.2	3.5	-2.4	42	1.2	-0.8	-0.9	95	6.3	-6.3	0.6	92	12.7	-12.7	0.4	85	17.4	-17.3	-1.5			
22	290	5.4	5.1	-1.9	301	5.2	4.5	-2.7	325	3.9	2.2	-3.2	40	3.1	-2.0	-2.4	70	6.6	-6.2	-2.2	89	11.2	-11.2	-0.2	85	19.5	-19.4	-1.6			
23	280	5.3	5.2	-0.9	289	4.9	4.6	-1.6	316	3.0	2.1	-2.2	4	1.5	-0.1	-1.5	79	5.3	-5.2	-1.0	74	10.1	-9.7	-2.7	94	17.3	-17.3	1.1			
24	287	3.0	2.9	-0.9	283	4.5	4.4	-1.0	294	2.4	2.2	-1.0	41	3.0	-2.0	-2.3	78	5.3	-5.2	-1.1	94	12.4	-12.4	0.8	87	22.4	-22.4	-1.2			
25	263	3.1	3.1	0.4	265	3.5	3.5	0.3	241	3.5	3.1	1.7	331	1.3	0.6	-1.1	108	3.8	-3.6	1.2	103	10.9	-10.6	2.4	92	19.7	-19.7	0.7			
26	255	3.4	3.3	0.9	280	7.2	7.1	-1.3	282	4.4	4.3	-0.9	349	0.5	0.1	-0.5	89	4.0	-4.0	-0.1	100	10.2	-10.0	1.8	85	16.0	-15.9	-1.3			
27	282	5.5	5.4	-1.1	286	6.6	6.4	-1.8	314	3.0	2.2	-2.1	65	1.7	-1.5	-0.7	86	5.5	-5.5	-0.4	88	9.5	-9.5	-0.4	84	19.9	-19.8	-2.2			
28	262	4.9	4.9	0.7	291	5.3	4.9	-1.9	322	2.8	1.7	-2.2	56	3.0	-2.5	-1.7	83	6.5	-6.5	-0.8	102	12.8	-12.5	2.6	85	21.8	-21.7	-2.0			
29	280	4.2	4.1	-0.7	312	4.7	3.5	-3.1	2	2.9	-0.1	-2.9	59	2.7	-2.3	-1.4	99	6.1	-6.0	0.9	97	12.3	-12.2	1.4	83	22.0	-21.8	-2.7			
30	278	2.2	2.2	-0.3	319	4.4	2.9	-3.3	337	2.6	1.0	-2.4	92	2.8	-2.8	0.1	110	6.4	-6.0	2.2	121	9.1	-7.8	4.7	—	—	—	—			
31	296	5.3	4.8	-2.3	317	4.2	2.9	-3.1	336	4.4	1.8	-4.0	88	3.0	-3.0	-0.1	89	8.2	-8.2	-0.1	108	12.8	-12.2	4.0	100	13.0	-12.8	2.3			

Daily Normals of Upper Air Winds (1971-2000)

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BHOPAL

SEPTEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	317	4.8	3.3	-3.5	309	4.0	3.1	-2.5	8	2.8	-0.4	-2.8	8	1.4	-0.2	-1.4	96	9.4	-9.3	1.0	96	14.3	-14.2	1.6	78	17.5	-17.1	-3.6			
2	289	2.1	2.0	-0.7	303	4.6	3.9	-2.5	319	1.8	1.2	-1.4	95	2.4	-2.4	0.2	85	6.4	-6.4	-0.6	55	10.5	-8.6	-6.1	76	23.0	-22.3	-5.6			
3	279	6.0	5.9	-0.9	294	6.0	5.5	-2.4	320	3.0	1.9	-2.3	315	3.0	2.1	-2.1	104	5.4	-5.2	1.3	112	11.4	-10.6	4.2	79	23.0	-22.6	-4.4			
4	299	7.1	6.2	-3.5	294	6.4	5.8	-2.6	316	3.5	2.4	-2.5	330	2.8	1.4	-2.4	90	5.7	-5.7	0.0	102	12.8	-12.5	2.7	94	19.6	-19.6	1.4			
5	302	5.8	4.9	-3.1	298	6.4	5.6	-3.0	284	3.3	3.2	-0.8	274	1.3	1.3	-0.1	72	4.1	-3.9	-1.3	96	10.0	-9.9	1.1	86	12.8	-12.8	-1.0			
6	287	4.1	3.9	-1.2	299	6.5	5.7	-3.2	335	4.0	1.7	-3.6	301	3.7	3.2	-1.9	104	4.4	-4.3	1.1	96	12.0	-11.9	1.3	88	14.2	-14.2	-0.6			
7	300	4.2	3.6	-2.1	296	6.8	6.1	-3.0	321	3.2	2.0	-2.5	270	0.3	0.3	0.0	98	3.6	-3.6	0.5	87	10.4	-10.4	-0.6	80	17.0	-16.7	-3.0			
8	265	3.6	3.6	0.3	301	5.7	4.9	-3.0	349	2.5	0.5	-2.5	58	1.5	-1.3	-0.8	88	3.8	-3.8	-0.1	102	9.5	-9.3	1.9	71	13.4	-12.7	-4.3			
9	269	5.3	5.3	0.1	300	4.6	4.0	-2.3	343	3.4	1.0	-3.3	14	1.6	-0.4	-1.6	118	2.7	-2.4	1.3	110	10.2	-9.6	3.4	74	17.0	-16.3	-4.7			
10	262	4.4	4.4	0.6	299	4.7	4.1	-2.3	340	3.5	1.2	-3.3	339	3.1	1.1	-2.9	110	4.5	-4.2	1.5	107	9.6	-9.2	2.8	107	15.2	-14.5	4.5			
11	287	3.4	3.3	-1.0	305	5.8	4.8	-3.3	324	4.2	2.5	-3.4	358	2.6	0.1	-2.6	80	5.5	-5.4	-1.0	96	8.3	-8.3	0.8	101	12.9	-12.7	2.5			
12	280	4.0	3.9	-0.7	318	5.2	3.5	-3.9	320	3.0	1.9	-2.3	335	2.3	1.0	-2.1	86	2.9	-2.9	-0.2	102	10.8	-10.6	2.3	110	9.0	-8.5	3.1			
13	236	3.2	2.7	1.8	286	3.5	3.4	-1.0	305	3.2	2.6	-1.8	265	2.3	2.3	0.2	88	5.7	-5.7	-0.2	101	9.3	-9.1	1.7	86	15.4	-15.4	-1.2			
14	314	3.2	2.3	-2.2	330	5.2	2.6	-4.5	331	4.1	2.0	-3.6	286	1.8	1.7	-0.5	69	3.1	-2.9	-1.1	105	6.7	-6.5	1.7	94	14.4	-14.4	1.1			
15	327	4.3	2.3	-3.6	310	4.7	3.6	-3.0	323	5.5	3.3	-4.4	323	2.1	1.3	-1.7	111	3.1	-2.9	1.1	107	12.0	-11.5	3.5	82	12.0	-11.9	-1.7			
16	321	6.3	4.0	-4.9	322	8.3	5.1	-6.5	326	8.6	4.8	-7.1	335	1.4	0.6	-1.3	180	1.5	0.0	1.5	113	5.9	-5.4	2.3	109	14.0	-13.2	4.6			
17	304	4.8	4.0	-2.7	320	6.7	4.3	-5.1	328	5.9	3.1	-5.0	294	2.0	1.8	-0.8	155	2.6	-1.1	2.4	133	6.3	-4.6	4.3	100	9.8	-9.7	1.7			
18	297	6.4	5.7	-2.9	315	6.1	4.3	-4.3	335	3.8	1.6	-3.4	264	3.6	3.6	0.4	174	2.7	-0.3	2.7	140	5.4	-3.5	4.1	92	14.6	-14.6	0.6			
19	293	5.6	5.1	-2.2	319	5.5	3.6	-4.2	340	2.9	1.0	-2.7	278	2.8	2.8	-0.4	171	1.9	-0.3	1.9	131	4.1	-3.1	2.7	96	10.2	-10.1	1.1			
20	320	4.2	2.7	-3.2	357	3.3	0.2	-3.3	33	3.3	-1.8	-2.8	225	2.0	1.4	1.4	200	3.8	1.3	3.6	181	6.1	0.1	6.1	132	9.3	-6.9	6.3			
21	347	3.1	0.7	-3.0	2	2.7	-0.1	-2.7	358	2.3	0.1	-2.3	267	3.5	3.5	0.2	212	3.6	1.9	3.0	187	4.1	0.5	4.1	128	4.3	-3.4	2.7			
22	298	2.1	1.9	-1.0	354	1.9	0.2	-1.9	29	2.6	-1.3	-2.3	227	2.3	1.7	1.6	163	4.2	-1.2	4.0	176	2.9	-0.2	2.9	127	6.3	-5.0	3.8			
23	322	1.6	1.0	-1.3	3	2.1	-0.1	-2.1	31	2.9	-1.5	-2.5	239	2.3	2.0	1.2	229	3.7	2.8	2.4	191	4.8	0.9	4.7	104	6.0	-5.8	1.4			
24	330	3.4	1.7	-2.9	349	3.2	0.6	-3.1	355	2.5	0.2	-2.5	241	3.5	3.1	1.7	196	3.6	1.0	3.5	142	6.1	-3.7	4.8	97	8.3	-8.2	1.0			
25	323	3.9	2.3	-3.1	345	2.7	0.7	-2.6	2	2.9	-0.1	-2.9	325	1.6	0.9	-1.3	247	5.9	5.4	2.3	220	5.6	3.6	4.3	138	4.2	-2.8	3.1			
26	343	3.0	0.9	-2.9	8	3.5	-0.5	-3.5	22	2.9	-1.1	-2.7	221	2.0	1.3	1.5	274	5.9	5.9	-0.4	249	5.5	5.1	2.0	115	4.7	-4.3	2.0			
27	354	1.0	0.1	-1.0	338	2.9	1.1	-2.7	343	2.4	0.7	-2.3	265	3.8	3.8	0.3	269	5.6	5.6	0.1	221	4.5	3.0	3.4	62	6.0	-5.3	-2.8			
28	353	2.5	0.3	-2.5	344	2.2	0.6	-2.1	320	3.0	1.9	-2.3	285	3.9	3.8	-1.0	247	5.8	5.3	2.3	255	8.8	8.5	2.2	128	3.7	-2.9	2.3			
29	360	1.6	0.0	-1.6	353	2.3	0.3	-2.3	350	3.5	0.6	-3.4	295	4.0	3.6	-1.7	257	5.5	5.4	1.2	259	6.1	6.0	1.2	73	6.4	-6.1	-1.9			
30	347	2.8	0.6	-2.7	7	3.2	-0.4	-3.2	2	3.6	-0.1	-3.6	322	2.3	1.4	-1.8	246	6.6	6.0	2.7	224	7.1	5.0	5.1	66	1.0	-0.9	-0.4			

Daily Normals of Upper Air Winds (1971-2000)

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BHOPAL

OCTOBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	360	3.4	0.0	-3.4	5	4.6	-0.4	-4.6	8	3.5	-0.5	-3.5	313	3.3	2.4	-2.2	252	4.9	4.7	1.5	208	6.2	2.9	5.5	147	4.8	-2.6	4.0			
2	354	2.8	0.3	-2.8	21	4.7	-1.7	-4.4	30	4.4	-2.2	-3.8	307	2.5	2.0	-1.5	233	6.9	5.5	4.1	248	8.4	7.8	3.1	305	3.7	3.0	-2.1			
3	354	2.0	0.2	-2.0	14	2.1	-0.5	-2.0	32	2.6	-1.4	-2.2	259	3.1	3.0	0.6	250	8.1	7.6	2.8	229	6.6	5.0	4.3	124	3.6	-3.0	2.0			
4	345	4.7	1.2	-4.5	360	3.8	0.0	-3.8	346	2.1	0.5	-2.0	248	3.7	3.4	1.4	255	9.9	9.6	2.6	250	9.8	9.2	3.3	176	1.3	-0.1	1.3			
5	12	3.5	-0.7	-3.4	7	3.4	-0.4	-3.4	313	2.5	1.8	-1.7	277	4.0	4.0	-0.5	244	7.0	6.3	3.1	224	8.6	6.0	6.2	180	2.8	0.0	2.8			
6	12	3.3	-0.7	-3.2	7	4.2	-0.5	-4.2	352	3.6	0.5	-3.6	310	3.8	2.9	-2.4	244	8.3	7.5	3.6	225	8.4	5.9	6.0	183	5.5	0.3	5.5			
7	360	3.4	0.0	-3.4	43	3.3	-2.2	-2.4	47	3.7	-2.7	-2.5	289	3.7	3.5	-1.2	252	8.3	7.9	2.6	234	7.6	6.1	4.5	217	6.9	4.1	5.5			
8	16	4.1	-1.1	-3.9	12	2.5	-0.5	-2.4	352	2.1	0.3	-2.1	295	4.7	4.3	-2.0	262	8.9	8.8	1.2	255	10.7	10.3	2.8	153	2.0	-0.9	1.8			
9	22	3.7	-1.4	-3.4	2	2.8	-0.1	-2.8	8	3.7	-0.5	-3.7	304	4.1	3.4	-2.3	250	8.3	7.8	2.9	240	8.8	7.6	4.4	128	5.3	-4.2	3.3			
10	34	2.7	-1.5	-2.2	18	3.6	-1.1	-3.4	20	2.7	-0.9	-2.5	261	4.5	4.4	0.7	243	9.2	8.2	4.2	236	11.2	9.2	6.3	183	7.7	0.4	7.7			
11	60	1.4	-1.2	-0.7	2	3.1	-0.1	-3.1	20	1.5	-0.5	-1.4	267	5.6	5.6	0.3	249	10.3	9.6	3.7	241	12.3	10.8	5.9	247	3.3	3.0	1.3			
12	338	1.1	0.4	-1.0	330	2.8	1.4	-2.4	345	2.0	0.5	-1.9	279	7.4	7.3	-1.1	253	10.9	10.4	3.1	246	11.4	10.4	4.7	231	3.5	2.7	2.2			
13	76	1.6	-1.6	-0.4	358	3.0	0.1	-3.0	341	3.1	1.0	-2.9	276	7.1	7.1	-0.7	254	11.1	10.7	3.0	241	14.1	12.3	6.8	228	6.7	5.0	4.5			
14	47	1.9	-1.4	-1.3	353	3.2	0.4	-3.2	322	3.6	2.2	-2.8	290	7.2	6.8	-2.5	263	12.8	12.7	1.6	248	18.8	17.5	6.9	210	2.4	1.2	2.1			
15	28	3.8	-1.8	-3.4	6	3.0	-0.3	-3.0	324	1.9	1.1	-1.5	288	6.6	6.3	-2.1	260	12.3	12.1	2.2	237	14.8	12.4	8.0	215	4.0	2.3	3.3			
16	33	3.0	-1.6	-2.5	352	2.8	0.4	-2.8	328	3.1	1.6	-2.6	300	6.0	5.2	-3.0	260	11.9	11.7	2.0	231	13.2	10.3	8.2	147	4.4	-2.4	3.7			
17	69	2.6	-2.4	-0.9	357	2.2	0.1	-2.2	313	2.5	1.8	-1.7	287	5.9	5.6	-1.7	251	10.5	9.9	3.5	255	13.1	12.6	3.4	183	4.0	0.2	4.0			
18	27	2.8	-1.3	-2.5	342	2.6	0.8	-2.5	326	1.1	0.6	-0.9	289	6.5	6.1	-2.1	268	10.6	10.6	0.3	250	12.9	12.1	4.4	226	5.0	3.6	3.5			
19	324	1.4	0.8	-1.1	336	2.4	1.0	-2.2	322	2.8	1.7	-2.2	293	9.0	8.3	-3.6	265	11.0	11.0	1.0	239	12.5	10.7	6.5	177	2.0	-0.1	2.0			
20	8	2.1	-0.3	-2.1	350	3.5	0.6	-3.4	333	3.1	1.4	-2.8	284	6.4	6.2	-1.6	263	15.4	15.3	2.0	253	17.8	17.1	5.1	226	8.3	6.0	5.8			
21	58	1.5	-1.3	-0.8	355	3.6	0.3	-3.6	323	3.1	1.9	-2.5	302	7.5	6.4	-4.0	266	13.3	13.3	0.9	254	16.9	16.3	4.6	258	9.7	9.5	2.0			
22	8	2.7	-0.4	-2.7	17	3.1	-0.9	-3.0	2	2.6	-0.1	-2.6	293	6.9	6.3	-2.7	261	14.1	13.9	2.3	256	18.2	17.7	4.4	263	14.5	14.4	1.7			
23	350	2.9	0.5	-2.9	15	2.8	-0.7	-2.7	322	1.6	1.0	-1.3	282	8.8	8.6	-1.8	274	14.7	14.7	-1.0	261	15.8	15.6	2.6	263	2.4	2.4	0.3			
24	3	2.2	-0.1	-2.2	6	1.9	-0.2	-1.9	310	2.5	1.9	-1.6	285	9.5	9.2	-2.5	269	19.0	19.0	0.2	261	20.8	20.6	3.1	284	16.6	16.1	-4.1			
25	358	2.8	0.1	-2.8	4	2.6	-0.2	-2.6	311	2.0	1.5	-1.3	285	10.2	9.8	-2.7	270	16.4	16.4	0.1	260	18.7	18.4	3.4	346	4.0	1.0	-3.9			
26	40	2.6	-1.7	-2.0	30	3.2	-1.6	-2.8	347	2.6	0.6	-2.5	284	6.4	6.2	-1.5	264	17.5	17.4	1.7	255	19.8	19.1	5.1	222	4.2	2.8	3.1			
27	15	5.2	-1.3	-5.0	9	3.0	-0.5	-3.0	342	2.2	0.7	-2.1	282	7.5	7.3	-1.5	259	18.4	18.1	3.4	250	22.2	20.8	7.7	218	4.9	3.0	3.9			
28	26	3.7	-1.6	-3.3	14	2.9	-0.7	-2.8	341	2.1	0.7	-2.0	291	8.4	7.8	-3.0	265	15.5	15.4	1.3	255	18.8	18.1	5.0	248	3.2	3.0	1.2			
29	34	2.7	-1.5	-2.2	10	3.4	-0.6	-3.3	20	2.9	-1.0	-2.7	289	7.7	7.3	-2.5	268	15.0	15.0	0.4	247	18.7	17.2	7.4	47	1.6	-1.2	-1.1			
30	52	2.3	-1.8	-1.4	27	3.4	-1.5	-3.0	357	2.2	0.1	-2.2	264	8.4	8.4	0.9	248	20.6	19.1	7.7	242	23.7	20.9	11.2	225	4.0	2.8	2.8			
31	56	2.5	-2.1	-1.4	40	3.8	-2.4	-2.9	21	2.6	-0.9	-2.4	286	8.0	7.7	-2.2	259	19.1	18.7	3.8	249	23.0	21.5	8.1	58	1.3	-1.1	-0.7			

Daily Normals of Upper Air Winds (1971-2000)

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BHOPAL

NOVEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	44	3.0	-2.1	-2.2	44	3.0	-2.1	-2.2	360	2.6	0.0	-2.6	288	7.9	7.5	-2.5	270	16.2	16.2	-0.1	263	17.8	17.7	2.1	280	14.5	14.3	-2.6			
2	29	3.1	-1.5	-2.7	31	3.3	-1.7	-2.8	348	3.0	0.6	-2.9	292	8.0	7.4	-3.0	271	15.4	15.4	-0.4	259	22.4	22.0	4.4	265	10.9	10.9	0.9			
3	63	3.3	-2.9	-1.5	46	3.0	-2.2	-2.1	357	1.7	0.1	-1.7	285	7.1	6.9	-1.8	266	19.2	19.2	1.3	264	20.7	20.6	2.3	264	17.7	17.6	1.9			
4	50	1.6	-1.2	-1.0	39	2.7	-1.7	-2.1	336	2.7	1.1	-2.5	279	7.9	7.8	-1.3	270	19.4	19.4	0.1	269	27.7	27.7	0.5	261	11.1	11.0	1.8			
5	27	2.2	-1.0	-2.0	20	2.9	-1.0	-2.7	319	3.2	2.1	-2.4	286	9.6	9.2	-2.6	272	19.2	19.2	-0.6	267	24.9	24.9	1.1	264	12.0	11.9	1.2			
6	52	3.4	-2.7	-2.1	45	2.3	-1.6	-1.6	311	2.3	1.7	-1.5	283	9.6	9.4	-2.1	270	19.8	19.8	0.1	268	25.1	25.1	0.8	330	14.0	7.0	-12.1			
7	69	2.2	-2.1	-0.8	29	2.5	-1.2	-2.2	340	3.2	1.1	-3.0	275	9.3	9.3	-0.8	273	18.8	18.8	-1.1	254	20.6	19.8	5.8	53	2.0	-1.6	-1.2			
8	108	1.6	-1.5	0.5	18	0.6	-0.2	-0.6	310	1.7	1.3	-1.1	278	9.6	9.5	-1.3	278	17.3	17.1	-2.3	253	22.4	21.4	6.7	—	—	—	—			
9	67	2.6	-2.4	-1.0	40	1.7	-1.1	-1.3	306	3.1	2.5	-1.8	283	11.4	11.1	-2.6	267	26.3	26.3	1.4	258	26.2	25.6	5.6	239	13.3	11.4	6.8			
10	51	1.3	-1.0	-0.8	347	2.2	0.5	-2.1	295	3.8	3.4	-1.6	294	9.5	8.7	-3.8	292	17.1	15.9	-6.3	281	24.2	23.7	-4.7	244	6.0	5.4	2.6			
11	4	1.6	-0.1	-1.6	350	2.3	0.4	-2.3	316	3.6	2.5	-2.6	303	9.3	7.8	-5.1	276	22.0	21.9	-2.2	267	21.9	21.9	1.1	302	6.7	5.7	-3.5			
12	344	2.6	0.7	-2.5	8	2.8	-0.4	-2.8	322	2.9	1.8	-2.3	298	9.5	8.4	-4.5	274	22.9	22.8	-1.7	256	28.3	27.4	6.9	253	12.2	11.7	3.5			
13	53	1.0	-0.8	-0.6	28	1.9	-0.9	-1.7	321	3.5	2.2	-2.7	303	8.5	7.1	-4.6	277	19.4	19.3	-2.2	267	23.3	23.3	1.4	284	6.8	6.6	-1.7			
14	35	1.9	-1.1	-1.6	51	2.2	-1.7	-1.4	313	2.6	1.9	-1.8	278	8.8	8.7	-1.2	261	21.0	20.8	3.2	254	26.6	25.5	7.4	258	23.4	22.9	4.7			
15	50	3.1	-2.4	-2.0	38	2.4	-1.5	-1.9	336	2.2	0.9	-2.0	280	7.2	7.1	-1.2	268	22.3	22.3	0.7	258	24.1	23.5	5.2	262	15.4	15.3	2.1			
16	37	4.0	-2.4	-3.2	36	2.6	-1.5	-2.1	289	3.1	2.9	-1.0	278	8.2	8.1	-1.2	263	18.9	18.8	2.3	255	24.3	23.5	6.3	268	14.9	14.9	0.4			
17	63	4.8	-4.3	-2.2	20	2.7	-0.9	-2.5	291	4.0	3.7	-1.4	274	10.3	10.3	-0.7	265	18.6	18.5	1.5	257	25.7	25.1	5.7	240	6.7	5.8	3.4			
18	49	2.1	-1.6	-1.4	7	2.5	-0.3	-2.5	296	5.0	4.5	-2.2	273	11.7	11.7	-0.7	261	26.0	25.7	4.0	257	35.4	34.5	8.1	253	15.3	14.7	4.4			
19	360	1.7	0.0	-1.7	338	1.6	0.6	-1.5	293	4.7	4.3	-1.8	287	13.7	13.1	-3.9	270	24.9	24.9	-0.2	242	30.6	27.0	14.3	245	25.0	22.6	10.6			
20	17	2.1	-0.6	-2.0	7	1.7	-0.2	-1.7	295	3.8	3.5	-1.6	278	12.3	12.2	-1.8	261	26.6	26.3	4.0	247	32.6	30.0	12.8	—	—	—	—			
21	67	1.5	-1.4	-0.6	37	1.5	-0.9	-1.2	291	3.9	3.6	-1.4	270	13.0	13.0	0.1	257	26.1	25.4	5.9	252	35.1	33.4	10.8	255	6.9	6.7	1.8			
22	76	0.8	-0.8	-0.2	348	1.4	0.3	-1.4	274	4.9	4.9	-0.3	270	13.1	13.1	0.1	264	24.2	24.1	2.4	253	35.1	33.6	10.3	—	—	—	—			
23	33	2.7	-1.5	-2.3	357	1.8	0.1	-1.8	299	5.2	4.6	-2.5	277	11.4	11.3	-1.3	274	25.6	25.5	-1.9	256	29.8	28.9	7.3	—	—	—	—			
24	30	3.2	-1.6	-2.8	11	2.1	-0.4	-2.1	292	4.3	4.0	-1.6	280	13.3	13.1	-2.2	265	27.8	27.7	2.2	262	30.7	30.4	4.2	268	18.6	18.6	0.5			
25	15	1.1	-0.3	-1.1	337	1.5	0.6	-1.4	288	3.6	3.4	-1.1	278	14.6	14.4	-2.1	268	26.4	26.4	0.8	258	31.1	30.4	6.4	253	11.8	11.3	3.4			
26	349	1.6	0.3	-1.6	331	2.1	1.0	-1.8	283	5.3	5.2	-1.2	278	16.4	16.2	-2.3	270	28.1	28.1	-0.2	266	30.5	30.4	2.3	263	24.0	23.8	2.9			
27	68	0.5	-0.5	-0.2	328	1.5	0.8	-1.3	289	6.8	6.4	-2.2	277	16.4	16.3	-1.9	268	28.1	28.1	1.0	253	35.7	34.1	10.7	266	20.0	20.0	1.4			
28	41	2.0	-1.3	-1.5	354	1.0	0.1	-1.0	297	6.1	5.4	-2.8	282	13.4	13.1	-2.7	266	27.6	27.5	2.0	255	36.9	35.7	9.5	265	34.9	34.8	3.1			
29	18	1.3	-0.4	-1.2	352	1.5	0.2	-1.5	292	5.6	5.2	-2.1	280	13.6	13.4	-2.3	266	26.8	26.7	2.1	250	33.2	31.3	11.1	251	15.0	14.2	4.9			
30	20	2.3	-0.8	-2.2	4	3.1	-0.2	-3.1	295	4.2	3.8	-1.8	275	16.1	16.0	-1.3	272	28.4	28.4	-0.9	254	38.1	36.6	10.6	—	—	—	—			

Daily Normals of Upper Air Winds (1971-2000)

BHOPAL

DECEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	44	2.8	-1.9	-2.0	28	2.4	-1.1	-2.1	292	5.3	4.9	-2.0	276	15.7	15.6	-1.6	266	31.2	31.1	2.1	250	39.6	37.2	13.5	249	31.9	29.9	11.2			
2	38	2.4	-1.5	-1.9	336	1.2	0.5	-1.1	286	4.7	4.5	-1.3	277	12.5	12.4	-1.5	263	26.9	26.7	3.5	246	31.9	29.1	13.0	255	46.0	44.4	11.9			
3	42	3.8	-2.5	-2.8	13	1.8	-0.4	-1.8	284	4.4	4.3	-1.1	269	13.8	13.8	0.3	264	26.3	26.2	2.6	234	36.5	29.7	21.2	268	22.0	22.0	0.8			
4	58	3.4	-2.9	-1.8	360	2.3	0.0	-2.3	301	4.7	4.0	-2.4	282	13.9	13.6	-2.8	262	23.6	23.4	3.3	252	28.2	26.8	8.7	220	20.0	12.9	15.3			
5	68	2.2	-2.0	-0.8	29	2.1	-1.0	-1.8	301	4.9	4.2	-2.5	282	14.2	13.9	-2.9	264	24.8	24.7	2.7	245	26.9	24.4	11.4	257	41.0	39.9	9.5			
6	22	1.8	-0.7	-1.7	7	0.8	-0.1	-0.8	303	5.6	4.7	-3.1	285	13.3	12.9	-3.4	261	26.1	25.8	3.9	255	36.9	35.7	9.4	224	19.0	13.2	13.7			
7	61	1.8	-1.6	-0.9	23	1.5	-0.6	-1.4	310	4.7	3.6	-3.0	273	14.1	14.1	-0.7	264	25.3	25.1	2.8	253	34.9	33.4	10.1	257	17.9	17.4	4.0			
8	48	1.2	-0.9	-0.8	23	0.8	-0.3	-0.7	264	4.8	4.8	0.5	264	13.6	13.5	1.3	259	26.0	25.5	4.9	260	30.3	29.8	5.5	262	18.0	17.8	2.5			
9	355	1.2	0.1	-1.2	302	1.3	1.1	-0.7	271	6.2	6.2	-0.1	260	14.4	14.2	2.5	259	25.6	25.1	5.1	250	28.1	26.5	9.4	264	26.8	26.7	2.7			
10	350	1.7	0.3	-1.7	300	1.4	1.2	-0.7	292	5.7	5.3	-2.1	273	14.9	14.9	-0.9	262	27.4	27.1	3.9	255	34.4	33.3	8.8	309	9.0	7.0	-5.7			
11	11	2.1	-0.4	-2.1	279	0.6	0.6	-0.1	275	4.3	4.3	-0.4	280	13.7	13.5	-2.4	263	28.1	27.9	3.4	254	29.1	27.9	8.2	269	26.0	26.0	0.5			
12	56	2.7	-2.2	-1.5	351	1.3	0.2	-1.3	277	6.0	6.0	-0.7	268	16.3	16.3	0.7	263	27.3	27.1	3.2	243	27.7	24.8	12.4	267	19.0	19.0	1.0			
13	10	2.3	-0.4	-2.3	330	2.4	1.2	-2.1	284	5.4	5.2	-1.3	280	14.9	14.7	-2.6	270	27.5	27.5	0.2	254	39.1	37.5	11.1	104	7.0	-6.8	1.7			
14	13	1.7	-0.4	-1.7	360	1.7	0.0	-1.7	290	5.5	5.2	-1.9	275	13.7	13.6	-1.3	267	23.9	23.9	1.4	262	32.3	32.0	4.3	262	28.5	28.2	3.9			
15	31	2.3	-1.2	-2.0	360	1.0	0.0	-1.0	298	4.9	4.3	-2.3	281	14.5	14.2	-2.8	275	25.6	25.5	-2.2	264	37.8	37.6	4.2	269	20.5	20.5	0.5			
16	45	2.7	-1.9	-1.9	14	1.6	-0.4	-1.6	295	5.9	5.3	-2.5	273	15.5	15.5	-0.7	271	25.1	25.1	-0.6	250	34.1	32.0	11.8	266	15.0	15.0	1.0			
17	35	2.8	-1.6	-2.3	5	1.1	-0.1	-1.1	294	5.7	5.2	-2.3	278	16.2	16.0	-2.3	266	24.8	24.7	1.8	262	30.7	30.4	4.1	—	—	—	—			
18	46	3.0	-2.2	-2.1	341	1.8	0.6	-1.7	296	5.8	5.2	-2.5	281	14.2	13.9	-2.8	268	29.8	29.8	1.0	259	37.5	36.8	7.3	285	8.0	7.7	-2.1			
19	22	2.2	-0.8	-2.0	335	1.9	0.8	-1.7	289	5.8	5.5	-1.9	282	14.4	14.1	-2.9	277	22.1	21.9	-2.8	274	37.2	37.1	-2.7	—	—	—	—			
20	21	0.9	-0.3	-0.8	318	1.3	0.9	-1.0	302	5.7	4.8	-3.0	296	15.7	14.1	-7.0	280	22.4	22.1	-3.7	268	27.6	27.6	0.8	—	—	—	—			
21	339	0.9	0.3	-0.8	306	1.4	1.1	-0.8	297	6.0	5.4	-2.7	288	12.4	11.8	-3.9	274	26.2	26.1	-1.8	300	20.8	17.9	-10.5	—	—	—	—			
22	360	1.8	0.0	-1.8	313	2.1	1.5	-1.4	289	6.8	6.4	-2.2	282	16.2	15.9	-3.3	268	25.1	25.1	0.9	269	40.5	40.5	0.7	—	—	—	—			
23	28	2.1	-1.0	-1.9	301	1.2	1.0	-0.6	273	8.4	8.4	-0.4	275	17.5	17.4	-1.4	275	28.2	28.1	-2.7	282	37.7	36.9	-7.7	241	12.0	10.5	5.8			
24	8	1.4	-0.2	-1.4	300	2.4	2.1	-1.2	269	8.3	8.3	0.1	280	16.9	16.7	-2.8	276	31.1	30.9	-3.1	279	33.3	32.9	-5.0	—	—	—	—			
25	24	3.0	-1.2	-2.7	336	1.0	0.4	-0.9	268	5.6	5.6	0.2	277	16.1	16.0	-2.1	276	27.6	27.5	-2.8	257	38.4	37.4	8.7	—	—	—	—			
26	71	2.1	-2.0	-0.7	301	0.6	0.5	-0.3	263	5.7	5.7	0.7	267	16.9	16.9	1.0	269	32.5	32.5	0.7	267	32.2	32.2	1.5	—	—	—	—			
27	45	1.0	-0.7	-0.7	298	1.7	1.5	-0.8	272	7.3	7.3	-0.3	277	16.9	16.8	-2.1	277	30.9	30.7	-3.8	270	50.8	50.8	0.3	241	43.0	37.6	20.8			
28	7	2.6	-0.3	-2.6	300	1.6	1.4	-0.8	280	7.3	7.2	-1.3	286	15.3	14.7	-4.2	273	28.6	28.6	-1.4	245	44.6	40.4	18.8	262	19.0	18.8	2.6			
29	27	0.7	-0.3	-0.6	297	0.9	0.8	-0.4	283	7.7	7.5	-1.7	274	18.2	18.2	-1.2	271	28.1	28.1	-0.3	256	36.0	34.9	8.9	—	—	—	—			
30	52	1.6	-1.3	-1.0	300	1.6	1.4	-0.8	282	9.3	9.1	-2.0	278	19.8	19.6	-2.8	269	31.9	31.9	0.6	261	36.4	35.9	5.9	—	—	—	—			
31	50	2.3	-1.8	-1.5	315	1.7	1.2	-1.2	290	7.7	7.3	-2.6	283	15.9	15.5	-3.5	271	35.2	35.2	-0.9	265	25.5	25.4	2.2	269	21.0	21.0	0.4			

Daily Normals of Upper Air Winds (1971-2000)

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BHUBANESHWAR

JANUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	43	2.6	-1.8	-1.9	316	3.2	2.2	-2.3	296	9.1	8.2	-4.0	279	15.8	15.6	-2.4	274	26.7	26.6	-1.8	265	28.6	28.5	2.6	264	21.3	21.2	2.1			
2	19	2.4	-0.8	-2.3	329	3.7	1.9	-3.2	303	8.7	7.3	-4.7	277	16.6	16.5	-2.1	272	27.9	27.9	-1.2	262	32.4	32.1	4.4	260	13.3	13.1	2.3			
3	14	3.2	-0.8	-3.1	331	4.9	2.4	-4.3	299	8.8	7.7	-4.2	279	15.5	15.3	-2.3	275	27.2	27.1	-2.5	269	33.0	33.0	0.6	263	21.1	20.9	2.6			
4	349	1.5	0.3	-1.5	331	4.1	2.0	-3.6	297	6.3	5.6	-2.8	278	14.0	13.9	-1.9	266	28.0	27.9	2.0	253	28.8	27.5	8.4	267	17.2	17.2	0.8			
5	222	1.2	0.8	0.9	333	3.6	1.6	-3.2	297	8.7	7.8	-3.9	280	14.2	14.0	-2.4	268	26.0	26.0	0.8	256	27.1	26.3	6.5	245	14.7	13.3	6.3			
6	30	1.6	-0.8	-1.4	333	3.0	1.4	-2.7	288	8.8	8.4	-2.7	273	14.9	14.9	-0.7	260	26.6	26.2	4.4	253	32.7	31.3	9.6	255	12.2	11.8	3.2			
7	45	0.4	-0.3	-0.3	331	4.1	2.0	-3.6	294	8.0	7.3	-3.2	275	15.9	15.8	-1.4	263	28.6	28.4	3.4	264	28.2	28.1	2.9	260	14.9	14.7	2.6			
8	326	1.1	0.6	-0.9	311	3.0	2.3	-2.0	291	7.3	6.8	-2.6	272	17.5	17.5	-0.6	269	27.1	27.1	0.4	263	34.2	33.9	4.2	254	22.0	21.2	5.9			
9	75	2.0	-1.9	-0.5	316	3.5	2.4	-2.5	291	7.4	6.9	-2.6	271	16.3	16.3	-0.4	268	29.4	29.4	1.1	267	29.4	29.4	1.3	262	16.0	15.9	2.1			
10	315	1.1	0.8	-0.8	324	3.6	2.1	-2.9	294	8.7	8.0	-3.5	274	16.4	16.4	-1.1	259	27.7	27.2	5.3	264	30.6	30.4	3.3	261	19.0	18.8	3.0			
11	8	0.7	-0.1	-0.7	308	3.6	2.8	-2.2	294	7.6	6.9	-3.1	274	16.8	16.8	-1.2	260	27.7	27.3	4.6	254	30.2	29.0	8.4	245	16.1	14.6	6.8			
12	29	1.0	-0.5	-0.9	321	2.7	1.7	-2.1	292	7.3	6.8	-2.7	279	17.8	17.6	-2.9	267	26.4	26.4	1.5	255	27.8	26.9	7.2	261	18.2	18.0	2.8			
13	4	1.5	-0.1	-1.5	321	3.2	2.0	-2.5	296	8.5	7.6	-3.7	271	16.8	16.8	-0.3	267	27.8	27.8	1.4	255	29.0	28.0	7.7	253	14.3	13.7	4.2			
14	315	0.1	0.1	-0.1	323	2.6	1.6	-2.1	296	8.0	7.2	-3.5	273	17.8	17.8	-0.9	267	30.4	30.4	1.5	259	28.7	28.2	5.5	262	14.0	13.9	1.9			
15	218	1.8	1.1	1.4	303	2.4	2.0	-1.3	282	8.4	8.2	-1.8	272	17.7	17.7	-0.7	268	30.2	30.2	0.9	256	32.2	31.3	7.7	263	21.2	21.1	2.5			
16	287	3.4	3.3	-1.0	299	4.1	3.6	-2.0	290	9.7	9.1	-3.4	279	18.5	18.3	-2.8	269	27.2	27.2	0.6	261	29.4	29.0	4.6	256	14.1	13.7	3.3			
17	357	2.2	0.1	-2.2	319	3.2	2.1	-2.4	293	8.5	7.8	-3.3	284	16.9	16.4	-4.0	272	28.6	28.6	-1.2	268	30.3	30.3	1.3	269	19.7	19.7	0.4			
18	156	1.0	-0.4	0.9	318	2.8	1.9	-2.1	297	7.6	6.8	-3.5	283	17.5	17.1	-3.8	264	29.4	29.2	3.3	258	28.6	27.9	6.1	269	11.2	11.2	0.1			
19	180	0.2	0.0	0.2	319	4.3	2.8	-3.2	296	9.7	8.7	-4.3	271	16.9	16.9	-0.3	264	27.3	27.2	2.8	256	31.7	30.7	7.9	256	17.6	17.1	4.3			
20	180	1.5	0.0	1.5	321	3.2	2.0	-2.5	299	9.2	8.1	-4.4	282	16.1	15.8	-3.3	266	28.4	28.3	2.0	250	32.7	30.8	11.0	259	19.1	18.7	3.8			
21	336	2.7	1.1	-2.5	313	3.7	2.7	-2.5	302	8.6	7.3	-4.6	277	15.8	15.7	-1.8	262	25.8	25.6	3.5	253	28.4	27.1	8.5	256	12.0	11.6	2.9			
22	63	0.2	-0.2	-0.1	320	3.4	2.2	-2.6	307	9.6	7.6	-5.8	282	16.0	15.6	-3.4	270	26.0	26.0	0.2	258	30.7	30.1	6.2	264	18.9	18.8	2.1			
23	34	0.7	-0.4	-0.6	312	3.9	2.9	-2.6	301	9.7	8.3	-5.0	276	16.6	16.5	-1.8	274	25.4	25.3	-1.7	263	29.5	29.3	3.4	264	20.8	20.7	2.0			
24	337	2.6	1.0	-2.4	324	3.9	2.3	-3.2	313	8.9	6.5	-6.1	278	15.7	15.5	-2.3	271	24.3	24.3	-0.3	262	25.7	25.4	3.7	265	13.5	13.4	1.2			
25	338	3.1	1.2	-2.9	314	3.9	2.8	-2.7	304	7.9	6.6	-4.4	280	14.2	14.0	-2.4	274	23.5	23.5	-1.5	268	30.1	30.1	1.1	262	16.4	16.2	2.4			
26	341	2.1	0.7	-2.0	338	3.5	1.3	-3.2	313	7.9	5.7	-5.4	279	12.6	12.5	-1.9	271	24.8	24.8	-0.5	266	26.9	26.8	1.9	256	18.4	17.9	4.4			
27	22	0.5	-0.2	-0.5	343	2.8	0.8	-2.7	300	6.6	5.7	-3.3	278	15.7	15.5	-2.3	268	25.8	25.8	0.9	257	34.2	33.3	7.9	254	16.3	15.7	4.5			
28	260	1.1	1.1	0.2	323	3.1	1.9	-2.5	305	8.5	7.0	-4.9	277	16.2	16.1	-2.0	272	26.9	26.9	-0.9	260	28.8	28.4	4.8	262	16.2	16.1	2.2			
29	265	2.2	2.2	0.2	305	3.8	3.1	-2.2	302	9.3	7.9	-5.0	280	16.8	16.5	-3.0	271	25.1	25.1	-0.6	258	31.0	30.3	6.4	262	20.1	19.9	2.9			
30	156	1.2	-0.5	1.1	316	3.2	2.2	-2.3	300	8.6	7.5	-4.3	278	17.5	17.3	-2.5	273	27.5	27.5	-1.3	263	31.7	31.4	4.0	267	20.8	20.8	1.2			
31	180	1.1	0.0	1.1	305	1.6	1.3	-0.9	291	7.9	7.4	-2.9	274	17.6	17.6	-1.1	271	29.8	29.8	-0.7	259	31.0	30.5	5.7	268	19.6	19.6	0.7			

Daily Normals of Upper Air Winds (1971-2000)

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BHUBANESHWAR

FEBRUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	120	1.4	-1.2	0.7	300	3.2	2.8	-1.6	289	8.6	8.1	-2.8	275	18.7	18.6	-1.7	275	28.8	28.7	-2.4	263	31.2	31.0	3.7	260	21.5	21.2	3.6			
2	174	1.0	-0.1	1.0	315	3.0	2.1	-2.1	287	10.6	10.1	-3.1	280	18.0	17.7	-3.0	268	28.6	28.6	0.8	261	31.3	30.9	5.1	268	21.1	21.1	0.9			
3	141	1.9	-1.2	1.5	297	2.7	2.4	-1.2	292	9.4	8.7	-3.6	273	18.2	18.2	-0.8	265	29.0	28.9	2.6	260	33.3	32.8	5.8	254	23.9	22.9	6.7			
4	124	1.1	-0.9	0.6	285	3.1	3.0	-0.8	292	9.7	9.0	-3.7	280	17.5	17.2	-3.0	272	29.2	29.2	-1.1	269	28.5	28.5	0.4	267	23.4	23.4	1.3			
5	186	1.9	0.2	1.9	302	4.0	3.4	-2.1	292	11.3	10.5	-4.2	273	19.1	19.1	-1.0	266	33.3	33.2	2.4	266	31.1	31.0	2.3	268	28.3	28.3	1.2			
6	180	1.3	0.0	1.3	298	3.2	2.8	-1.5	292	10.1	9.4	-3.8	279	17.6	17.4	-2.9	272	29.2	29.2	-1.1	264	28.5	28.3	3.0	275	22.8	22.7	-1.9			
7	186	1.8	0.2	1.8	316	3.3	2.3	-2.4	285	9.7	9.4	-2.5	277	15.6	15.5	-1.8	270	28.0	28.0	0.1	263	29.0	28.8	3.3	259	19.6	19.2	3.9			
8	162	1.3	-0.4	1.2	300	2.2	1.9	-1.1	290	9.8	9.2	-3.4	280	17.9	17.6	-3.0	270	27.6	27.6	0.1	262	33.8	33.5	4.7	271	22.3	22.3	-0.2			
9	176	1.6	-0.1	1.6	289	2.1	2.0	-0.7	298	8.9	7.9	-4.2	278	18.0	17.8	-2.6	269	27.3	27.3	0.3	260	31.3	30.8	5.7	258	16.9	16.5	3.5			
10	345	1.1	0.3	-1.1	310	3.8	2.9	-2.4	297	9.8	8.7	-4.5	279	16.7	16.5	-2.7	268	28.2	28.2	1.0	267	29.3	29.3	1.4	277	17.6	17.5	-2.1			
11	311	1.8	1.4	-1.2	297	3.0	2.7	-1.4	300	9.7	8.4	-4.9	282	16.9	16.6	-3.4	279	27.1	26.8	-4.2	266	29.3	29.2	2.1	265	14.9	14.8	1.3			
12	259	2.0	2.0	0.4	314	3.0	2.2	-2.1	307	8.8	7.0	-5.3	275	15.3	15.2	-1.3	279	25.1	24.8	-4.0	263	28.0	27.8	3.3	260	16.7	16.4	2.9			
13	298	1.9	1.7	-0.9	314	3.6	2.6	-2.5	304	8.7	7.2	-4.8	279	15.7	15.5	-2.5	270	28.0	28.0	0.0	266	27.3	27.2	1.8	265	16.2	16.1	1.3			
14	267	1.8	1.8	0.1	298	3.2	2.8	-1.5	287	7.4	7.1	-2.2	276	16.9	16.8	-1.7	269	27.8	27.8	0.3	264	29.9	29.7	3.0	256	16.4	15.9	4.1			
15	199	3.4	1.1	3.2	285	3.1	3.0	-0.8	291	9.0	8.4	-3.3	266	16.6	16.6	1.2	273	27.8	27.8	-1.3	267	30.1	30.1	1.6	262	19.3	19.1	2.8			
16	98	1.4	-1.4	0.2	283	2.8	2.7	-0.6	276	9.0	8.9	-1.0	274	17.5	17.5	-1.2	273	27.4	27.4	-1.4	262	28.9	28.6	4.2	269	18.8	18.8	0.2			
17	187	5.7	0.7	5.7	286	2.6	2.5	-0.7	292	9.5	8.8	-3.5	271	20.3	20.3	-0.2	265	29.6	29.5	2.7	255	30.9	29.8	8.0	254	18.4	17.7	5.1			
18	196	1.5	0.4	1.4	284	3.6	3.5	-0.9	289	10.4	9.8	-3.4	274	19.2	19.2	-1.2	268	27.5	27.5	1.2	259	30.7	30.2	5.6	259	15.6	15.3	2.9			
19	211	2.1	1.1	1.8	284	3.6	3.5	-0.9	293	9.6	8.9	-3.7	279	17.2	17.0	-2.8	269	27.9	27.9	0.7	257	28.8	28.1	6.5	250	15.4	14.5	5.3			
20	194	3.4	0.8	3.3	307	3.5	2.8	-2.1	298	10.9	9.6	-5.1	269	17.4	17.4	0.2	267	26.6	26.6	1.5	259	25.6	25.1	4.8	259	18.9	18.5	3.7			
21	173	3.3	-0.4	3.3	309	4.1	3.2	-2.6	296	10.6	9.5	-4.7	276	17.6	17.5	-1.7	267	27.9	27.9	1.5	262	29.8	29.5	4.4	266	19.1	19.1	1.3			
22	223	2.3	1.6	1.7	309	3.2	2.5	-2.0	297	8.9	7.9	-4.1	281	17.2	16.9	-3.4	262	29.4	29.1	4.3	266	30.2	30.1	2.3	269	20.4	20.4	0.4			
23	188	0.7	0.1	0.7	286	3.5	3.4	-1.0	300	10.3	8.9	-5.1	282	19.8	19.4	-4.0	267	28.4	28.4	1.5	263	28.7	28.5	3.7	271	19.3	19.3	-0.5			
24	189	2.0	0.3	2.0	292	4.8	4.5	-1.8	303	10.3	8.6	-5.6	277	16.6	16.5	-1.9	270	26.5	26.5	0.1	266	29.7	29.6	2.2	260	26.0	25.6	4.7			
25	205	2.1	0.9	1.9	296	4.3	3.9	-1.9	308	8.7	6.9	-5.3	280	16.4	16.2	-2.8	265	27.6	27.5	2.4	260	34.0	33.5	6.0	263	22.6	22.4	2.8			
26	226	2.8	2.0	1.9	293	3.6	3.3	-1.4	299	9.7	8.5	-4.7	285	13.5	13.0	-3.5	269	27.3	27.3	0.7	263	30.1	29.9	3.6	251	15.1	14.3	4.9			
27	220	2.3	1.5	1.8	292	3.5	3.2	-1.3	299	10.6	9.3	-5.1	279	15.6	15.4	-2.4	268	24.8	24.8	0.7	262	28.7	28.4	4.0	273	20.6	20.6	-1.2			
28	192	3.0	0.6	2.9	286	3.3	3.2	-0.9	300	8.8	7.6	-4.4	278	15.3	15.1	-2.2	270	27.7	27.7	-0.2	264	30.9	30.8	3.0	271	21.7	21.7	-0.5			
29	250	3.2	3.0	1.1	284	4.9	4.8	-1.2	308	10.2	8.0	-6.3	291	13.5	12.6	-4.9	272	24.3	24.3	-1.0	258	30.6	30.0	6.2	276	16.7	16.6	-1.8			

Daily Normals of Upper Air Winds (1971-2000)

75

BHUBANESHWAR

MARCH

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	212	1.5	0.8	1.3	279	4.6	4.5	-0.7	299	9.9	8.7	-4.8	278	15.0	14.8	-2.2	268	25.5	25.5	1.1	268	33.0	33.0	1.1	262	22.4	22.2	3.3			
2	175	1.1	-0.1	1.1	297	3.9	3.5	-1.8	297	10.2	9.1	-4.7	286	14.7	14.1	-4.1	276	26.0	25.8	-2.9	267	30.1	30.1	1.7	259	18.4	18.1	3.5			
3	231	0.6	0.5	0.4	303	3.7	3.1	-2.0	298	8.8	7.8	-4.1	286	12.6	12.1	-3.5	277	26.7	26.5	-3.1	266	29.0	28.9	2.1	267	19.1	19.1	0.9			
4	266	1.5	1.5	0.1	301	3.7	3.2	-1.9	308	9.1	7.2	-5.6	292	13.6	12.6	-5.1	273	23.2	23.2	-1.3	259	29.9	29.3	5.9	266	15.3	15.3	1.1			
5	241	3.1	2.7	1.5	293	3.3	3.0	-1.3	303	8.6	7.2	-4.7	278	13.9	13.8	-2.0	272	25.9	25.9	-0.7	262	27.9	27.6	3.9	265	17.3	17.2	1.5			
6	206	4.3	1.9	3.9	283	3.6	3.5	-0.8	304	8.4	7.0	-4.7	279	14.9	14.7	-2.2	274	24.4	24.3	-1.9	264	27.8	27.6	2.9	268	15.0	15.0	0.6			
7	204	2.0	0.8	1.8	274	2.8	2.8	-0.2	305	8.1	6.6	-4.7	281	14.8	14.5	-2.9	271	26.7	26.7	-0.6	253	27.5	26.3	8.0	266	14.7	14.7	1.1			
8	185	1.2	0.1	1.2	286	3.7	3.6	-1.0	305	9.3	7.6	-5.4	284	15.2	14.7	-3.8	278	21.7	21.5	-2.9	266	28.4	28.3	1.9	262	17.1	16.9	2.5			
9	119	1.3	-1.1	0.6	305	3.7	3.0	-2.1	301	8.7	7.4	-4.5	283	16.1	15.7	-3.6	274	26.3	26.2	-1.9	259	30.2	29.6	5.9	267	22.7	22.7	1.0			
10	149	1.2	-0.6	1.0	308	2.9	2.3	-1.8	301	9.2	7.9	-4.7	275	14.9	14.9	-1.2	265	28.6	28.5	2.6	256	32.8	31.8	8.0	264	21.9	21.8	2.4			
11	163	4.2	-1.2	4.0	298	3.6	3.2	-1.7	302	9.5	8.1	-5.0	280	14.8	14.6	-2.5	271	27.5	27.5	-0.6	254	30.6	29.5	8.2	267	17.5	17.5	0.8			
12	214	3.0	1.7	2.5	300	4.2	3.6	-2.1	303	8.5	7.2	-4.6	282	15.4	15.0	-3.3	267	24.2	24.2	1.1	262	31.8	31.5	4.5	261	17.8	17.6	2.7			
13	201	6.6	2.4	6.1	294	4.7	4.3	-1.9	294	9.4	8.6	-3.8	281	16.0	15.7	-3.1	267	24.9	24.9	1.2	269	29.1	29.1	0.7	265	22.2	22.1	2.0			
14	202	3.7	1.4	3.4	305	3.7	3.0	-2.1	290	8.5	8.0	-2.9	284	15.1	14.7	-3.6	271	25.1	25.1	-0.6	265	31.4	31.3	2.7	264	16.2	16.1	1.8			
15	208	1.9	0.9	1.7	307	3.0	2.4	-1.8	304	9.0	7.5	-5.0	293	14.7	13.5	-5.7	284	22.8	22.1	-5.6	274	22.8	22.8	-1.4	276	13.9	13.8	-1.4			
16	222	1.3	0.9	1.0	312	3.8	2.8	-2.5	307	10.2	8.2	-6.1	292	12.6	11.7	-4.8	276	23.2	23.1	-2.3	272	26.2	26.2	-0.8	282	15.0	14.7	-3.0			
17	212	0.9	0.5	0.8	306	4.1	3.3	-2.4	298	8.6	7.6	-4.1	284	13.8	13.4	-3.4	271	24.5	24.5	-0.3	267	27.4	27.4	1.5	258	17.4	17.0	3.7			
18	255	1.6	1.5	0.4	278	3.5	3.5	-0.5	308	9.3	7.3	-5.7	283	13.9	13.5	-3.2	263	21.5	21.3	2.6	259	25.0	24.6	4.7	265	13.9	13.8	1.2			
19	217	2.0	1.2	1.6	284	3.3	3.2	-0.8	301	9.1	7.8	-4.6	285	13.9	13.5	-3.5	270	22.2	22.2	-0.1	261	25.8	25.5	3.9	256	12.3	11.9	3.0			
20	178	3.3	-0.1	3.3	258	1.9	1.9	0.4	303	9.0	7.5	-4.9	280	13.7	13.5	-2.3	275	25.6	25.5	-2.2	265	26.6	26.5	2.3	268	14.3	14.3	0.4			
21	213	3.3	1.8	2.8	284	3.8	3.7	-0.9	297	10.0	8.9	-4.6	293	13.9	12.8	-5.5	278	22.6	22.4	-3.0	269	25.7	25.7	0.5	265	14.2	14.1	1.3			
22	209	4.1	2.0	3.6	315	3.1	2.2	-2.2	306	8.7	7.1	-5.1	282	12.3	12.0	-2.5	277	20.9	20.8	-2.4	260	28.2	27.8	5.0	266	15.9	15.9	1.1			
23	220	5.4	3.5	4.1	272	2.7	2.7	-0.1	295	8.2	7.4	-3.5	289	11.4	10.8	-3.7	274	21.9	21.8	-1.5	251	28.2	26.7	9.0	260	14.1	13.9	2.5			
24	199	6.2	2.0	5.9	278	2.9	2.9	-0.4	296	8.8	7.9	-3.8	278	11.3	11.2	-1.5	272	20.6	20.6	-0.8	266	27.4	27.3	1.9	272	16.9	16.9	-0.5			
25	162	3.5	-1.1	3.3	245	3.1	2.8	1.3	295	6.9	6.3	-2.9	274	11.6	11.6	-0.9	266	21.2	21.1	1.6	260	28.6	28.1	5.2	266	20.1	20.1	1.4			
26	231	4.6	3.6	2.9	266	3.9	3.9	0.3	291	7.4	6.9	-2.6	280	12.5	12.3	-2.1	276	22.9	22.8	-2.2	262	29.3	29.0	3.9	258	18.1	17.7	3.7			
27	223	4.0	2.7	2.9	287	3.7	3.5	-1.1	300	8.2	7.1	-4.1	290	11.5	10.8	-3.9	270	22.4	22.4	0.0	258	27.8	27.2	5.6	274	14.4	14.4	-1.1			
28	190	4.5	0.8	4.4	283	3.1	3.0	-0.7	304	7.8	6.5	-4.4	289	10.9	10.3	-3.6	272	20.0	20.0	-0.8	272	22.2	22.2	-0.7	287	12.4	11.9	-3.6			
29	195	5.0	1.3	4.8	289	2.8	2.6	-0.9	302	8.1	6.9	-4.3	299	11.5	10.1	-5.6	277	20.5	20.3	-2.6	266	22.4	22.3	1.5	270	12.2	12.2	0.0			
30	191	4.2	0.8	4.1	286	4.1	3.9	-1.1	308	7.0	5.5	-4.3	299	11.3	9.9	-5.5	278	20.0	19.8	-2.9	262	26.3	26.0	3.7	252	13.9	13.3	4.2			
31	199	1.8	0.6	1.7	298	2.7	2.4	-1.3	304	5.8	4.8	-3.2	277	9.9	9.8	-1.2	265	21.1	21.0	1.8	261	27.4	27.1	4.2	258	19.3	18.9	4.0			

Daily Normals of Upper Air Winds (1971-2000)

76

BHUBANESHWAR

APRIL

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	192	5.0	1.0	4.9	263	3.9	3.9	0.5	299	7.1	6.2	-3.4	293	11.6	10.6	-4.6	273	19.2	19.2	-1.0	261	27.6	27.2	4.4	260	16.0	15.8	2.8			
2	186	3.0	0.3	3.0	286	3.3	3.2	-0.9	307	7.0	5.6	-4.2	285	9.7	9.4	-2.5	269	19.9	19.9	0.4	260	23.9	23.6	4.0	272	11.8	11.8	-0.4			
3	186	6.2	0.7	6.2	283	2.7	2.6	-0.6	312	6.4	4.7	-4.3	286	10.7	10.3	-3.0	265	20.3	20.2	1.6	258	21.9	21.4	4.5	267	14.1	14.1	0.7			
4	211	3.7	1.9	3.2	291	3.3	3.1	-1.2	305	7.5	6.1	-4.3	282	11.0	10.8	-2.3	261	22.7	22.4	3.4	263	25.3	25.1	3.3	267	7.9	7.9	0.4			
5	216	3.9	2.3	3.2	280	2.8	2.8	-0.5	302	6.4	5.4	-3.4	282	11.5	11.2	-2.4	272	23.1	23.1	-0.7	267	25.9	25.9	1.3	273	13.5	13.5	-0.7			
6	209	5.6	2.7	4.9	302	3.8	3.2	-2.0	306	8.2	6.6	-4.8	293	11.4	10.5	-4.5	277	20.2	20.1	-2.3	267	24.7	24.7	1.1	267	13.9	13.9	0.7			
7	219	5.8	3.7	4.5	300	4.8	4.1	-2.4	305	7.8	6.4	-4.5	290	10.7	10.1	-3.6	285	23.4	22.6	-6.0	273	26.0	26.0	-1.2	275	12.6	12.5	-1.2			
8	217	4.5	2.7	3.6	278	4.3	4.3	-0.6	311	8.2	6.2	-5.4	289	12.5	11.8	-4.0	278	21.6	21.4	-2.9	268	26.5	26.5	1.1	260	12.3	12.1	2.2			
9	216	5.2	3.1	4.2	281	3.7	3.6	-0.7	305	6.4	5.2	-3.7	279	10.4	10.3	-1.6	273	21.5	21.5	-1.3	265	22.5	22.4	2.0	262	16.9	16.7	2.3			
10	196	5.0	1.4	4.8	275	3.6	3.6	-0.3	302	8.1	6.9	-4.3	286	10.5	10.1	-2.9	273	21.9	21.9	-1.2	261	25.2	24.9	3.8	263	13.0	12.9	1.6			
11	213	4.6	2.5	3.9	285	3.5	3.4	-0.9	308	6.5	5.1	-4.0	284	12.2	11.8	-3.0	275	20.5	20.4	-1.9	269	24.4	24.4	0.6	269	10.1	10.1	0.1			
12	211	4.1	2.1	3.5	284	5.3	5.1	-1.3	305	9.1	7.5	-5.2	296	11.7	10.5	-5.2	278	19.4	19.2	-2.7	274	20.1	20.0	-1.5	289	8.7	8.2	-2.8			
13	187	5.0	0.6	5.0	279	3.1	3.1	-0.5	305	8.0	6.6	-4.6	292	12.3	11.4	-4.6	277	21.7	21.6	-2.5	270	22.3	22.3	-0.1	259	9.0	8.8	1.7			
14	193	4.4	1.0	4.3	276	3.1	3.1	-0.3	310	7.6	5.8	-4.9	295	9.7	8.8	-4.1	277	19.0	18.9	-2.2	265	22.1	22.0	1.8	270	12.1	12.1	0.1			
15	214	6.9	3.9	5.7	266	3.0	3.0	0.2	290	5.5	5.2	-1.9	291	10.3	9.6	-3.7	275	19.7	19.6	-1.8	269	21.2	21.2	0.3	275	11.0	11.0	-1.0			
16	243	1.6	1.4	0.7	261	3.8	3.8	0.6	291	5.3	4.9	-1.9	284	8.3	8.1	-2.0	271	19.1	19.1	-0.4	262	22.9	22.7	3.2	254	9.7	9.3	2.7			
17	215	5.0	2.9	4.1	284	3.7	3.6	-0.9	307	6.9	5.5	-4.1	287	10.7	10.2	-3.2	263	21.0	20.8	2.7	264	23.3	23.2	2.6	261	13.8	13.6	2.2			
18	209	6.2	3.0	5.4	267	3.7	3.7	0.2	307	6.9	5.5	-4.1	295	9.9	9.0	-4.2	277	18.0	17.9	-2.3	260	22.9	22.5	4.0	250	7.3	6.9	2.5			
19	209	6.3	3.0	5.5	268	2.8	2.8	0.1	305	6.3	5.2	-3.6	293	8.2	7.5	-3.2	277	18.0	17.9	-2.2	262	21.6	21.4	3.1	269	4.8	4.8	0.1			
20	234	4.4	3.6	2.6	272	3.3	3.3	-0.1	314	5.9	4.2	-4.1	297	10.1	9.0	-4.6	270	20.5	20.5	0.0	254	22.7	21.8	6.2	258	3.8	3.7	0.8			
21	215	7.1	4.1	5.8	277	3.3	3.3	-0.4	314	6.8	4.9	-4.7	299	8.9	7.8	-4.3	273	19.0	19.0	-0.9	258	22.5	22.0	4.5	271	5.0	5.0	-0.1			
22	208	7.6	3.5	6.7	278	3.5	3.5	-0.5	314	5.0	3.6	-3.5	292	8.1	7.5	-3.1	266	17.2	17.2	1.2	256	24.0	23.3	5.7	268	6.9	6.9	0.3			
23	235	5.2	4.3	3.0	265	3.3	3.3	0.3	316	5.9	4.1	-4.2	290	7.6	7.1	-2.6	272	19.5	19.5	-0.6	254	21.0	20.2	5.7	278	8.0	7.9	-1.1			
24	205	7.0	3.0	6.3	249	3.6	3.4	1.3	307	4.8	3.8	-2.9	285	8.5	8.2	-2.2	269	17.4	17.4	0.3	258	19.5	19.1	3.9	277	7.9	7.8	-0.9			
25	202	5.8	2.2	5.4	269	4.2	4.2	0.1	311	5.5	4.2	-3.6	278	9.4	9.3	-1.3	266	15.9	15.9	1.1	250	21.0	19.8	7.1	256	10.2	9.9	2.5			
26	199	3.1	1.0	2.9	260	2.3	2.3	0.4	311	4.8	3.6	-3.1	283	9.2	9.0	-2.1	266	13.3	13.3	0.9	260	20.1	19.8	3.5	274	9.0	9.0	-0.6			
27	166	5.0	-1.2	4.9	263	2.6	2.6	0.3	320	5.2	3.3	-4.0	299	9.4	8.2	-4.5	261	15.7	15.5	2.5	263	19.0	18.9	2.3	315	4.5	3.2	-3.2			
28	215	5.1	2.9	4.2	288	2.8	2.7	-0.9	319	6.1	4.0	-4.6	297	7.4	6.6	-3.3	276	13.9	13.8	-1.5	255	15.2	14.7	4.0	264	4.1	4.1	0.4			
29	212	6.6	3.5	5.6	265	3.2	3.2	0.3	320	6.2	4.0	-4.8	299	8.3	7.3	-4.0	282	14.3	14.0	-2.9	265	15.2	15.1	1.4	204	1.2	0.5	1.1			
30	193	4.9	1.1	4.8	282	3.5	3.4	-0.7	315	5.2	3.7	-3.7	303	7.9	6.6	-4.3	275	16.0	15.9	-1.5	278	17.8	17.6	-2.4	277	0.8	0.8	-0.1			

Daily Normals of Upper Air Winds (1971-2000)

BHUBANESHWAR

MAY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	214	5.3	3.0	4.4	264	2.7	2.7	0.3	327	5.7	3.1	-4.8	299	7.6	6.6	-3.7	276	14.4	14.3	-1.5	267	16.5	16.5	0.9	205	2.3	1.0	2.1			
2	189	5.1	0.8	5.0	265	3.4	3.4	0.3	318	5.9	4.0	-4.4	297	8.1	7.2	-3.7	278	15.8	15.6	-2.2	267	15.2	15.2	0.9	215	1.9	1.1	1.6			
3	212	7.3	3.9	6.2	284	3.7	3.6	-0.9	313	6.4	4.7	-4.4	292	8.2	7.6	-3.1	273	13.2	13.2	-0.8	266	13.7	13.7	1.0	240	3.4	2.9	1.7			
4	222	6.6	4.4	4.9	274	4.3	4.3	-0.3	312	6.4	4.8	-4.3	307	9.2	7.4	-5.5	276	13.5	13.4	-1.5	268	16.4	16.4	0.7	286	4.0	3.8	-1.1			
5	213	4.8	2.6	4.0	281	2.5	2.5	-0.5	315	6.2	4.4	-4.4	297	8.9	7.9	-4.1	269	15.5	15.5	0.2	254	18.5	17.8	5.0	270	4.1	4.1	0.0			
6	206	5.2	2.3	4.7	266	3.0	3.0	0.2	314	5.3	3.8	-3.7	304	9.0	7.5	-5.0	274	14.6	14.6	-1.0	256	13.3	12.9	3.3	243	1.8	1.6	0.8			
7	215	6.6	3.8	5.4	255	3.0	2.9	0.8	313	4.4	3.2	-3.0	308	8.1	6.4	-5.0	273	13.3	13.3	-0.6	251	15.0	14.2	4.8	258	3.3	3.2	0.7			
8	208	5.1	2.4	4.5	297	2.7	2.4	-1.2	318	4.5	3.0	-3.3	302	7.5	6.4	-4.0	276	12.5	12.4	-1.4	262	12.9	12.8	1.8	301	1.7	1.5	-0.9			
9	181	4.1	0.1	4.1	258	4.4	4.3	0.9	315	4.2	3.0	-3.0	297	7.6	6.8	-3.4	278	13.0	12.9	-1.7	267	13.4	13.4	0.6	270	1.4	1.4	0.0			
10	217	4.6	2.8	3.7	258	2.4	2.3	0.5	319	4.3	2.8	-3.2	280	6.1	6.0	-1.1	267	12.3	12.3	0.7	259	12.8	12.6	2.5	137	1.9	-1.3	1.4			
11	191	5.2	1.0	5.1	245	2.6	2.4	1.1	310	3.9	3.0	-2.5	292	7.9	7.3	-2.9	261	10.1	10.0	1.5	259	11.2	11.0	2.1	121	3.1	-2.7	1.6			
12	204	3.2	1.3	2.9	248	3.1	2.9	1.2	302	4.0	3.4	-2.1	305	7.2	5.9	-4.1	264	13.1	13.0	1.3	250	11.2	10.5	3.8	79	1.6	-1.6	-0.3			
13	178	5.6	-0.2	5.6	249	2.8	2.6	1.0	326	4.6	2.6	-3.8	302	5.8	4.9	-3.1	273	8.4	8.4	-0.4	264	10.9	10.8	1.1	138	1.3	-0.9	1.0			
14	179	4.3	-0.1	4.3	253	2.8	2.7	0.8	333	4.6	2.1	-4.1	303	6.4	5.3	-3.5	266	6.6	6.6	0.5	260	8.5	8.4	1.5	121	0.6	-0.5	0.3			
15	222	3.8	2.5	2.8	281	3.6	3.5	-0.7	327	6.0	3.3	-5.0	311	6.7	5.1	-4.4	265	7.4	7.4	0.7	241	6.8	6.0	3.3	99	5.3	-5.2	0.8			
16	207	6.7	3.0	6.0	260	4.1	4.0	0.7	328	5.5	2.9	-4.7	307	6.1	4.9	-3.7	262	7.6	7.5	1.0	240	5.8	5.0	2.9	112	3.2	-3.0	1.2			
17	217	6.1	3.7	4.9	274	4.0	4.0	-0.3	326	7.2	4.0	-6.0	303	7.1	5.9	-3.9	265	9.5	9.5	0.8	258	8.9	8.7	1.9	174	1.8	-0.2	1.8			
18	207	3.7	1.7	3.3	298	3.4	3.0	-1.6	321	6.4	4.0	-5.0	301	8.2	7.1	-4.2	272	7.5	7.5	-0.2	243	8.7	7.8	3.9	165	2.3	-0.6	2.2			
19	253	1.4	1.3	0.4	298	3.0	2.6	-1.4	328	6.7	3.6	-5.7	313	7.4	5.4	-5.1	264	8.8	8.8	0.9	243	7.5	6.7	3.4	132	1.2	-0.9	0.8			
20	211	3.9	2.0	3.3	315	3.0	2.1	-2.1	327	6.7	3.6	-5.6	303	6.4	5.4	-3.5	260	6.4	6.3	1.1	238	7.9	6.7	4.2	134	4.9	-3.5	3.4			
21	202	5.8	2.2	5.4	295	2.9	2.6	-1.2	331	5.7	2.8	-5.0	299	6.5	5.7	-3.1	243	5.9	5.3	2.7	215	7.8	4.5	6.4	132	6.0	-4.5	4.0			
22	209	5.5	2.7	4.8	300	2.4	2.1	-1.2	327	5.9	3.2	-4.9	310	7.3	5.6	-4.7	250	7.4	7.0	2.5	221	8.3	5.4	6.3	127	4.5	-3.6	2.7			
23	212	5.2	2.8	4.4	323	3.1	1.9	-2.5	339	7.1	2.5	-6.6	320	7.8	5.0	-6.0	244	5.5	5.0	2.4	189	7.1	1.1	7.0	122	7.2	-6.1	3.8			
24	204	4.5	1.8	4.1	319	3.2	2.1	-2.4	337	7.7	3.0	-7.1	327	6.8	3.7	-5.7	242	5.7	5.0	2.7	205	7.7	3.2	7.0	112	6.6	-6.1	2.5			
25	211	4.4	2.3	3.8	308	2.9	2.3	-1.8	336	6.2	2.5	-5.7	327	5.7	3.1	-4.8	262	3.0	3.0	0.4	199	3.9	1.3	3.7	97	9.8	-9.7	1.2			
26	213	5.6	3.1	4.7	282	4.2	4.1	-0.9	331	6.3	3.0	-5.5	322	7.0	4.3	-5.5	260	3.6	3.5	0.6	239	5.0	4.3	2.6	117	8.3	-7.4	3.8			
27	246	4.5	4.1	1.8	279	3.7	3.7	-0.6	318	5.8	3.9	-4.3	308	6.1	4.8	-3.7	243	3.1	2.8	1.4	187	3.8	0.5	3.8	105	9.8	-9.5	2.6			
28	226	5.6	4.0	3.9	266	3.9	3.9	0.3	330	6.7	3.4	-5.8	316	6.6	4.6	-4.8	264	3.0	3.0	0.3	167	3.9	-0.9	3.8	105	11.6	-11.2	3.1			
29	225	4.2	3.0	3.0	291	2.6	2.4	-0.9	326	5.9	3.3	-4.9	309	6.8	5.3	-4.3	236	3.4	2.8	1.9	192	3.5	0.7	3.4	112	9.5	-8.8	3.5			
30	223	5.7	3.9	4.2	266	2.9	2.9	0.2	332	5.0	2.3	-4.4	304	6.3	5.2	-3.5	239	3.3	2.8	1.7	190	3.5	0.6	3.4	102	9.6	-9.4	2.0			
31	229	4.4	3.3	2.9	303	3.5	2.9	-1.9	338	5.0	1.9	-4.6	313	5.3	3.9	-3.6	258	1.9	1.9	0.4	185	4.4	0.4	4.4	104	11.7	-11.4	2.8			

Daily Normals of Upper Air Winds (1971-2000)

BHUBANESHWAR

JUNE

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	216	5.2	3.1	4.2	299	3.1	2.7	-1.5	328	5.2	2.7	-4.4	315	5.8	4.1	-4.1	225	0.1	0.1	0.1	127	2.6	-2.1	1.6	91	10.7	-10.7	0.1			
2	217	4.9	2.9	3.9	321	2.2	1.4	-1.7	340	4.8	1.6	-4.5	322	4.8	3.0	-3.8	270	0.8	0.8	0.0	131	4.4	-3.3	2.9	101	13.4	-13.1	2.6			
3	194	4.6	1.1	4.5	307	3.1	2.5	-1.9	335	6.4	2.7	-5.8	317	3.3	2.2	-2.4	225	0.8	0.6	0.6	129	4.6	-3.6	2.9	112	12.2	-11.3	4.5			
4	181	4.3	0.1	4.3	297	3.0	2.7	-1.4	334	6.8	3.0	-6.1	312	3.6	2.7	-2.4	248	2.2	2.0	0.8	125	3.5	-2.9	2.0	95	14.8	-14.7	1.4			
5	196	4.8	1.3	4.6	288	2.6	2.5	-0.8	315	4.5	3.2	-3.2	309	5.3	4.1	-3.3	174	0.9	-0.1	0.9	123	7.1	-5.9	3.9	93	13.9	-13.9	0.7			
6	209	6.5	3.2	5.7	265	3.5	3.5	0.3	322	3.3	2.0	-2.6	302	4.6	3.9	-2.4	270	0.3	0.3	0.0	111	3.4	-3.2	1.2	90	14.3	-14.3	-0.1			
7	206	6.2	2.7	5.6	263	3.3	3.3	0.4	295	3.8	3.4	-1.6	297	3.9	3.5	-1.8	120	0.8	-0.7	0.4	110	3.2	-3.0	1.1	90	12.2	-12.2	0.1			
8	193	4.1	0.9	4.0	283	2.7	2.6	-0.6	316	5.5	3.8	-4.0	301	5.0	4.3	-2.6	96	0.9	-0.9	0.1	93	5.3	-5.3	0.3	79	13.3	-13.1	-2.5			
9	201	5.3	1.9	4.9	273	4.1	4.1	-0.2	302	5.1	4.3	-2.7	299	3.9	3.4	-1.9	79	1.6	-1.6	-0.3	99	5.3	-5.2	0.8	79	14.4	-14.1	-2.8			
10	233	5.8	4.6	3.5	284	3.0	2.9	-0.7	320	4.0	2.6	-3.1	294	4.6	4.2	-1.9	78	1.4	-1.4	-0.3	88	6.3	-6.3	-0.2	87	16.5	-16.5	-0.9			
11	208	4.3	2.0	3.8	284	2.1	2.0	-0.5	324	4.2	2.5	-3.4	298	3.0	2.6	-1.4	95	2.3	-2.3	0.2	92	7.0	-7.0	0.3	84	19.2	-19.1	-1.9			
12	193	2.2	0.5	2.1	319	2.8	1.8	-2.1	327	2.4	1.3	-2.0	47	2.1	-1.5	-1.4	77	5.3	-5.2	-1.2	96	8.1	-8.1	0.9	80	17.9	-17.6	-3.1			
13	163	3.9	-1.1	3.7	329	1.2	0.6	-1.0	358	3.3	0.1	-3.3	311	1.1	0.8	-0.7	75	4.9	-4.7	-1.3	95	8.6	-8.6	0.7	84	16.9	-16.8	-1.7			
14	155	4.2	-1.8	3.8	324	0.9	0.5	-0.7	358	3.4	0.1	-3.4	333	1.1	0.5	-1.0	101	4.1	-4.0	0.8	91	11.5	-11.5	0.3	83	18.3	-18.2	-2.1			
15	183	2.1	0.1	2.1	309	1.3	1.0	-0.8	346	2.9	0.7	-2.8	299	1.0	0.9	-0.5	89	4.5	-4.5	-0.1	87	9.5	-9.5	-0.5	82	19.9	-19.7	-2.8			
16	259	1.0	1.0	0.2	321	2.7	1.7	-2.1	322	2.8	1.7	-2.2	292	3.1	2.9	-1.2	84	4.7	-4.7	-0.5	98	9.7	-9.6	1.4	86	16.7	-16.7	-1.1			
17	209	3.7	1.8	3.2	271	4.1	4.1	-0.1	283	3.1	3.0	-0.7	283	1.8	1.8	-0.4	114	3.2	-2.9	1.3	96	9.3	-9.3	0.9	84	17.1	-17.0	-1.7			
18	221	6.3	4.1	4.8	267	4.3	4.3	0.2	290	5.0	4.7	-1.7	290	3.3	3.1	-1.1	68	3.2	-3.0	-1.2	83	8.8	-8.7	-1.0	83	19.4	-19.2	-2.5			
19	215	9.8	5.6	8.0	270	4.2	4.2	0.0	293	4.3	4.0	-1.7	291	3.0	2.8	-1.1	80	5.2	-5.1	-0.9	83	11.8	-11.7	-1.4	90	17.5	-17.5	0.0			
20	245	7.5	6.8	3.2	276	4.5	4.5	-0.5	296	5.5	4.9	-2.4	295	4.1	3.7	-1.7	84	3.1	-3.1	-0.3	92	10.5	-10.5	0.4	84	24.7	-24.6	-2.5			
21	252	9.0	8.6	2.8	277	5.7	5.7	-0.7	293	5.6	5.1	-2.2	273	2.0	2.0	-0.1	87	4.3	-4.3	-0.2	84	12.8	-12.7	-1.3	83	19.0	-18.8	-2.4			
22	262	9.8	9.7	1.4	277	5.5	5.5	-0.7	290	5.1	4.8	-1.7	243	1.8	1.6	0.8	90	4.2	-4.2	0.0	82	11.7	-11.6	-1.6	79	24.0	-23.6	-4.5			
23	243	6.7	6.0	3.0	288	5.8	5.5	-1.8	298	5.1	4.5	-2.4	288	2.3	2.2	-0.7	82	6.5	-6.4	-0.9	78	12.5	-12.2	-2.6	79	21.0	-20.6	-3.9			
24	256	6.3	6.1	1.5	284	5.4	5.2	-1.3	294	3.5	3.2	-1.4	264	2.8	2.8	0.3	62	3.4	-3.0	-1.6	79	10.7	-10.5	-2.1	77	23.0	-22.4	-5.0			
25	249	5.6	5.2	2.0	277	6.0	6.0	-0.7	290	3.8	3.6	-1.3	294	2.0	1.8	-0.8	79	5.2	-5.1	-1.0	86	14.6	-14.6	-1.1	85	24.6	-24.5	-2.0			
26	241	3.9	3.4	1.9	263	4.3	4.3	0.5	270	3.2	3.2	0.0	240	0.8	0.7	0.4	87	7.5	-7.5	-0.4	81	15.2	-15.0	-2.4	76	23.3	-22.6	-5.6			
27	245	4.4	4.0	1.9	267	5.3	5.3	0.3	267	4.3	4.3	0.2	215	1.6	0.9	1.3	95	7.4	-7.4	0.6	83	12.9	-12.8	-1.5	82	24.7	-24.5	-3.5			
28	235	11.3	9.3	6.4	269	6.0	6.0	0.1	283	4.7	4.6	-1.1	305	1.2	1.0	-0.7	111	7.3	-6.8	2.6	86	13.9	-13.9	-1.0	81	24.4	-24.1	-3.9			
29	209	4.8	2.3	4.2	284	4.9	4.8	-1.2	289	3.9	3.7	-1.3	312	1.3	1.0	-0.9	88	7.3	-7.3	-0.3	87	14.4	-14.4	-0.8	87	26.2	-26.2	-1.2			
30	235	3.9	3.2	2.2	277	4.9	4.9	-0.6	274	4.9	4.9	-0.3	360	0.6	0.0	-0.6	99	5.9	-5.8	0.9	87	14.5	-14.5	-0.7	79	27.9	-27.4	-5.3			

Daily Normals of Upper Air Winds (1971-2000)

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BHUBANESHWAR

JULY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	218	2.4	1.5	1.9	278	5.1	5.1	-0.7	282	3.5	3.4	-0.7	338	1.1	0.4	-1.0	93	6.8	-6.8	0.3	87	12.9	-12.9	-0.7	78	25.3	-24.8	-5.2			
2	288	1.9	1.8	-0.6	264	5.0	5.0	0.5	274	4.0	4.0	-0.3	254	1.5	1.4	0.4	91	6.5	-6.5	0.1	89	15.8	-15.8	-0.3	81	29.1	-28.7	-4.7			
3	198	3.8	1.2	3.6	272	5.6	5.6	-0.2	279	5.6	5.5	-0.9	316	2.9	2.0	-2.1	79	7.2	-7.1	-1.4	83	14.5	-14.4	-1.8	81	25.0	-24.7	-4.0			
4	219	4.5	2.8	3.5	281	4.2	4.1	-0.8	287	4.2	4.0	-1.2	287	1.4	1.3	-0.4	80	7.7	-7.6	-1.3	79	15.6	-15.3	-3.1	83	27.3	-27.1	-3.1			
5	241	4.1	3.6	2.0	273	4.3	4.3	-0.2	270	3.7	3.7	0.0	4	1.5	-0.1	-1.5	74	7.2	-6.9	-2.0	86	14.9	-14.9	-1.1	80	26.5	-26.1	-4.7			
6	235	5.9	4.8	3.4	280	6.1	6.0	-1.1	281	4.4	4.3	-0.8	299	2.5	2.2	-1.2	86	4.4	-4.4	-0.3	82	14.0	-13.9	-1.9	83	25.9	-25.7	-3.3			
7	205	3.1	1.3	2.8	263	4.8	4.8	0.6	275	3.5	3.5	-0.3	198	0.6	0.2	0.6	84	8.1	-8.0	-0.9	87	15.8	-15.8	-0.9	82	24.3	-24.1	-3.2			
8	244	5.3	4.8	2.3	265	4.7	4.7	0.4	260	3.9	3.8	0.7	234	0.9	0.7	0.5	89	7.2	-7.2	-0.1	83	14.7	-14.6	-1.9	85	27.8	-27.7	-2.6			
9	242	6.8	6.0	3.2	259	4.1	4.0	0.8	268	3.5	3.5	0.1	360	0.7	0.0	-0.7	92	7.3	-7.3	0.3	90	14.8	-14.8	-0.1	85	29.3	-29.2	-2.5			
10	245	4.7	4.3	2.0	262	3.4	3.4	0.5	268	2.7	2.7	0.1	18	2.0	-0.6	-1.9	88	7.6	-7.6	-0.3	87	15.6	-15.6	-0.9	83	26.7	-26.5	-3.4			
11	227	4.8	3.5	3.3	279	4.7	4.6	-0.7	266	3.0	3.0	0.2	270	0.3	0.3	0.0	96	8.4	-8.4	0.9	75	15.4	-14.9	-3.9	85	27.1	-27.0	-2.3			
12	247	5.0	4.6	2.0	256	5.8	5.6	1.4	241	4.3	3.8	2.1	196	1.9	0.5	1.8	100	8.1	-8.0	1.4	74	15.7	-15.1	-4.2	86	25.4	-25.3	-1.9			
13	250	5.2	4.9	1.8	272	5.2	5.2	-0.2	261	3.9	3.9	0.6	146	0.4	-0.2	0.3	97	8.9	-8.8	1.1	84	13.6	-13.5	-1.5	81	23.6	-23.3	-3.5			
14	246	6.0	5.5	2.5	276	5.6	5.6	-0.6	273	3.8	3.8	-0.2	270	0.5	0.5	0.0	91	9.5	-9.5	0.1	85	17.7	-17.6	-1.5	80	24.2	-23.8	-4.4			
15	237	5.1	4.3	2.8	281	4.8	4.7	-0.9	276	3.9	3.9	-0.4	241	1.0	0.9	0.5	88	8.8	-8.8	-0.3	79	19.6	-19.2	-3.7	84	27.4	-27.3	-2.7			
16	247	4.4	4.1	1.7	273	4.4	4.4	-0.2	270	3.2	3.2	0.0	79	1.5	-1.5	-0.3	96	9.4	-9.3	1.0	77	17.2	-16.7	-4.0	79	28.5	-28.0	-5.2			
17	237	5.5	4.6	3.0	250	2.7	2.5	0.9	270	2.0	2.0	0.0	38	1.8	-1.1	-1.4	97	9.0	-8.9	1.1	80	14.9	-14.7	-2.5	85	25.9	-25.8	-2.1			
18	234	5.8	4.7	3.4	265	4.6	4.6	0.4	261	3.8	3.8	0.6	207	0.2	0.1	0.2	97	6.2	-6.1	0.8	80	15.1	-14.9	-2.7	81	29.3	-28.9	-4.8			
19	239	6.0	5.1	3.1	269	6.1	6.1	0.1	272	4.8	4.8	-0.2	265	2.2	2.2	0.2	83	10.1	-10.0	-1.3	78	17.4	-17.0	-3.5	81	24.0	-23.7	-3.9			
20	242	6.9	6.1	3.2	269	6.2	6.2	0.1	280	5.0	4.9	-0.9	34	0.4	-0.2	-0.3	78	7.2	-7.0	-1.5	80	14.8	-14.6	-2.5	82	27.4	-27.2	-3.6			
21	239	6.2	5.3	3.2	248	3.2	3.0	1.2	258	3.0	2.9	0.6	105	1.1	-1.1	0.3	96	6.8	-6.8	0.7	79	17.8	-17.5	-3.5	85	26.7	-26.6	-2.4			
22	249	6.2	5.8	2.2	253	3.4	3.2	1.0	254	3.2	3.1	0.9	143	0.5	-0.3	0.4	96	9.0	-8.9	1.0	79	16.8	-16.5	-3.1	81	25.2	-24.9	-4.0			
23	257	6.1	5.9	1.4	245	3.5	3.2	1.5	272	2.9	2.9	-0.1	176	1.5	-0.1	1.5	92	7.1	-7.1	0.2	87	16.8	-16.8	-0.8	83	28.8	-28.6	-3.6			
24	269	5.1	5.1	0.1	258	4.4	4.3	0.9	257	3.6	3.5	0.8	252	0.6	0.6	0.2	80	7.0	-6.9	-1.2	81	16.6	-16.4	-2.7	81	28.5	-28.2	-4.4			
25	269	5.2	5.2	0.1	283	5.7	5.6	-1.3	286	4.8	4.6	-1.3	308	2.3	1.8	-1.4	76	6.4	-6.2	-1.5	76	15.8	-15.3	-3.9	83	26.2	-26.0	-3.4			
26	287	4.8	4.6	-1.4	285	6.6	6.4	-1.7	293	4.3	4.0	-1.7	14	1.6	-0.4	-1.6	82	8.6	-8.5	-1.2	83	16.3	-16.2	-2.1	80	28.1	-27.6	-5.1			
27	244	6.0	5.4	2.6	266	6.0	6.0	0.4	279	4.7	4.6	-0.7	299	2.3	2.0	-1.1	86	6.0	-6.0	-0.4	73	15.5	-14.8	-4.5	77	25.3	-24.6	-5.9			
28	243	3.7	3.3	1.7	289	4.6	4.3	-1.5	285	4.1	4.0	-1.1	99	0.6	-0.6	0.1	91	7.4	-7.4	0.1	86	14.7	-14.7	-1.1	74	26.1	-25.1	-7.0			
29	229	3.8	2.9	2.5	280	5.2	5.1	-0.9	278	4.8	4.7	-0.7	248	0.5	0.5	0.2	91	7.2	-7.2	0.1	85	18.3	-18.2	-1.5	82	26.1	-25.9	-3.6			
30	271	4.8	4.8	-0.1	282	3.9	3.8	-0.8	292	2.9	2.7	-1.1	74	1.5	-1.4	-0.4	80	10.1	-10.0	-1.7	92	19.1	-19.1	0.6	83	25.0	-24.8	-3.0			
31	211	3.5	1.8	3.0	270	2.5	2.5	0.0	317	2.2	1.5	-1.6	56	4.1	-3.4	-2.3	82	8.8	-8.7	-1.2	78	15.0	-14.7	-3.1	82	28.8	-28.5	-3.9			

Daily Normals of Upper Air Winds (1971-2000)

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BHUBANESHWAR

AUGUST

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	249	2.5	2.3	0.9	283	3.1	3.0	-0.7	306	1.7	1.4	-1.0	54	3.9	-3.2	-2.3	88	8.4	-8.4	-0.3	88	16.3	-16.3	-0.7	80	25.2	-24.8	-4.3			
2	238	5.2	4.4	2.7	263	3.9	3.9	0.5	276	2.9	2.9	-0.3	45	1.4	-1.0	-1.0	88	8.8	-8.8	-0.3	81	15.4	-15.2	-2.3	74	23.5	-22.6	-6.5			
3	230	7.4	5.7	4.7	257	5.4	5.3	1.2	259	4.8	4.7	0.9	256	3.0	2.9	0.7	86	3.1	-3.1	-0.2	79	13.7	-13.5	-2.6	79	22.7	-22.2	-4.5			
4	222	5.2	3.5	3.9	269	4.8	4.8	0.1	268	4.8	4.8	0.2	259	1.6	1.6	0.3	81	6.7	-6.6	-1.1	74	12.2	-11.7	-3.4	86	26.6	-26.5	-1.9			
5	245	6.4	5.8	2.7	279	5.5	5.4	-0.9	277	4.0	4.0	-0.5	25	3.1	-1.3	-2.8	84	6.8	-6.8	-0.7	83	15.3	-15.2	-1.8	86	20.4	-20.3	-1.5			
6	267	7.1	7.1	0.4	266	6.2	6.2	0.4	268	4.7	4.7	0.2	20	1.5	-0.5	-1.4	81	6.2	-6.1	-1.0	78	12.9	-12.6	-2.6	81	25.9	-25.6	-3.9			
7	264	6.5	6.5	0.7	287	3.9	3.7	-1.1	301	2.3	2.0	-1.2	73	1.4	-1.3	-0.4	84	9.1	-9.0	-1.0	86	13.9	-13.9	-0.9	86	27.9	-27.8	-2.0			
8	276	5.9	5.9	-0.6	258	4.2	4.1	0.9	258	3.5	3.4	0.7	205	1.4	0.6	1.3	102	8.5	-8.3	1.7	80	15.7	-15.5	-2.6	82	24.4	-24.2	-3.3			
9	233	2.5	2.0	1.5	249	2.8	2.6	1.0	228	3.0	2.2	2.0	152	1.7	-0.8	1.5	88	7.6	-7.6	-0.2	86	16.0	-16.0	-1.2	83	25.7	-25.5	-3.3			
10	232	3.9	3.1	2.4	268	2.4	2.4	0.1	251	2.4	2.3	0.8	104	0.8	-0.8	0.2	86	8.6	-8.6	-0.6	85	16.8	-16.7	-1.5	77	26.9	-26.2	-6.2			
11	240	4.3	3.7	2.1	257	3.5	3.4	0.8	275	2.5	2.5	-0.2	30	1.6	-0.8	-1.4	81	8.1	-8.0	-1.3	77	17.5	-17.1	-3.8	81	22.6	-22.3	-3.7			
12	215	4.2	2.4	3.4	280	2.9	2.9	-0.5	252	2.6	2.5	0.8	30	0.8	-0.4	-0.7	89	9.0	-9.0	-0.1	77	16.8	-16.3	-3.9	74	22.1	-21.2	-6.2			
13	260	5.0	4.9	0.9	284	3.8	3.7	-0.9	280	3.4	3.3	-0.6	257	1.3	1.3	0.3	94	6.5	-6.5	0.4	91	14.0	-14.0	0.3	81	20.4	-20.2	-3.1			
14	258	3.3	3.2	0.7	286	2.6	2.5	-0.7	265	2.5	2.5	0.2	107	1.4	-1.3	0.4	94	6.5	-6.5	0.4	85	13.8	-13.7	-1.3	81	24.2	-23.9	-3.8			
15	240	4.3	3.7	2.1	248	4.2	3.9	1.6	253	3.4	3.2	1.0	90	0.2	-0.2	0.0	93	8.5	-8.5	0.5	82	15.7	-15.6	-2.1	85	25.6	-25.5	-2.4			
16	255	4.7	4.5	1.2	257	3.7	3.6	0.8	252	4.3	4.1	1.3	254	0.7	0.7	0.2	94	7.4	-7.4	0.5	87	13.4	-13.4	-0.8	83	24.3	-24.1	-2.9			
17	256	3.7	3.6	0.9	280	4.1	4.0	-0.7	281	2.0	2.0	-0.4	42	1.2	-0.8	-0.9	97	6.5	-6.5	0.8	82	14.2	-14.1	-1.9	78	27.1	-26.5	-5.8			
18	211	6.0	3.1	5.1	261	4.6	4.5	0.7	262	3.4	3.4	0.5	194	0.8	0.2	0.8	91	7.4	-7.4	0.1	86	15.1	-15.1	-1.1	81	25.7	-25.4	-4.2			
19	220	6.9	4.4	5.3	274	4.4	4.4	-0.3	265	3.5	3.5	0.3	77	2.3	-2.2	-0.5	88	8.7	-8.7	-0.3	90	14.5	-14.5	0.0	82	24.6	-24.4	-3.4			
20	234	5.4	4.4	3.2	270	2.5	2.5	0.0	292	1.8	1.7	-0.7	48	1.3	-1.0	-0.9	94	8.1	-8.1	0.5	82	15.7	-15.5	-2.3	89	22.8	-22.8	-0.5			
21	232	3.1	2.4	1.9	255	1.6	1.5	0.4	253	1.0	1.0	0.3	114	1.7	-1.6	0.7	92	6.2	-6.2	0.2	90	14.6	-14.6	-0.1	82	25.1	-24.9	-3.5			
22	197	1.4	0.4	1.3	265	2.4	2.4	0.2	255	2.3	2.2	0.6	183	1.7	0.1	1.7	99	8.4	-8.3	1.3	83	16.9	-16.8	-2.1	81	24.0	-23.7	-3.7			
23	206	4.9	2.1	4.4	249	3.3	3.1	1.2	239	2.9	2.5	1.5	201	1.4	0.5	1.3	100	7.5	-7.4	1.3	82	15.0	-14.9	-2.0	83	23.8	-23.6	-3.1			
24	233	3.0	2.4	1.8	261	4.0	4.0	0.6	266	2.7	2.7	0.2	82	0.7	-0.7	-0.1	91	7.8	-7.8	0.1	87	16.1	-16.1	-0.9	84	27.6	-27.4	-3.0			
25	191	2.6	0.5	2.6	268	2.5	2.5	0.1	282	2.5	2.4	-0.5	17	2.7	-0.8	-2.6	87	7.6	-7.6	-0.4	83	14.5	-14.4	-1.8	82	24.0	-23.8	-3.4			
26	174	0.9	-0.1	0.9	281	3.2	3.1	-0.6	318	2.8	1.9	-2.1	38	1.6	-1.0	-1.3	80	7.9	-7.8	-1.4	85	13.1	-13.0	-1.2	83	23.5	-23.3	-2.8			
27	128	1.1	-0.9	0.7	268	2.8	2.8	0.1	264	0.9	0.9	0.1	115	1.4	-1.3	0.6	105	6.7	-6.5	1.7	86	12.0	-12.0	-0.8	79	22.7	-22.3	-4.5			
28	224	2.9	2.0	2.1	261	4.3	4.2	0.7	249	3.4	3.2	1.2	143	1.0	-0.6	0.8	94	6.8	-6.8	0.5	87	13.8	-13.8	-0.7	84	21.0	-20.9	-2.2			
29	204	4.2	1.7	3.8	244	3.4	3.1	1.5	236	2.3	1.9	1.3	110	2.3	-2.2	0.8	99	7.8	-7.7	1.2	85	15.3	-15.2	-1.4	85	22.4	-22.3	-2.1			
30	210	3.0	1.5	2.6	266	3.1	3.1	0.2	252	2.0	1.9	0.6	75	2.0	-1.9	-0.5	85	8.1	-8.1	-0.7	85	13.8	-13.8	-1.1	80	23.4	-23.0	-4.2			
31	204	4.2	1.7	3.8	270	2.2	2.2	0.0	275	1.1	1.1	-0.1	75	1.1	-1.1	-0.3	95	7.2	-7.2	0.6	85	14.4	-14.3	-1.3	90	22.7	-22.7	0.0			

Daily Normals of Upper Air Winds (1971-2000)

BHUBANESHWAR

SEPTEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	215	3.5	2.0	2.9	274	2.8	2.8	-0.2	290	2.0	1.9	-0.7	117	0.4	-0.4	0.2	92	5.7	-5.7	0.2	87	12.8	-12.8	-0.7	84	22.6	-22.5	-2.3			
2	232	5.5	4.3	3.4	267	3.9	3.9	0.2	281	3.3	3.2	-0.6	315	0.1	0.1	-0.1	97	6.2	-6.1	0.8	88	12.5	-12.5	-0.5	79	23.6	-23.2	-4.5			
3	211	3.3	1.7	2.8	253	3.4	3.3	1.0	275	3.4	3.4	-0.3	261	0.6	0.6	0.1	83	5.5	-5.5	-0.7	82	14.0	-13.9	-1.9	73	25.3	-24.2	-7.4			
4	267	2.2	2.2	0.1	284	4.4	4.3	-1.1	273	3.5	3.5	-0.2	280	1.1	1.1	-0.2	112	4.8	-4.5	1.8	78	14.5	-14.2	-3.0	78	22.6	-22.1	-4.5			
5	217	3.0	1.8	2.4	274	4.3	4.3	-0.3	279	3.0	3.0	-0.5	112	0.5	-0.5	0.2	91	4.5	-4.5	0.1	85	10.7	-10.7	-1.0	85	21.4	-21.3	-1.7			
6	235	1.2	1.0	0.7	291	3.6	3.4	-1.3	286	4.0	3.8	-1.1	198	1.3	0.4	1.2	97	4.1	-4.1	0.5	91	12.8	-12.8	0.3	83	21.1	-21.0	-2.5			
7	215	1.2	0.7	1.0	304	2.7	2.2	-1.5	293	2.6	2.4	-1.0	96	1.0	-1.0	0.1	93	6.6	-6.6	0.4	98	10.6	-10.5	1.5	85	21.7	-21.6	-1.7			
8	211	2.3	1.2	2.0	340	1.5	0.5	-1.4	42	1.2	-0.8	-0.9	100	2.9	-2.9	0.5	99	6.3	-6.2	1.0	89	11.4	-11.4	-0.1	85	23.3	-23.2	-1.9			
9	166	0.4	-0.1	0.4	35	1.2	-0.7	-1.0	48	1.2	-0.9	-0.8	85	3.6	-3.6	-0.3	109	7.5	-7.1	2.4	89	12.1	-12.1	-0.2	84	20.4	-20.3	-2.3			
10	214	0.7	0.4	0.6	195	1.1	0.3	1.1	176	1.3	-0.1	1.3	118	2.7	-2.4	1.3	112	6.8	-6.3	2.5	89	10.2	-10.2	-0.2	90	17.7	-17.7	0.1			
11	249	3.1	2.9	1.1	195	2.4	0.6	2.3	196	1.9	0.5	1.8	190	2.9	0.5	2.9	110	4.8	-4.5	1.6	89	10.8	-10.8	-0.1	87	23.0	-23.0	-1.2			
12	243	2.8	2.5	1.3	245	3.1	2.8	1.3	252	2.5	2.4	0.8	236	0.7	0.6	0.4	106	6.6	-6.4	1.8	87	12.7	-12.7	-0.6	82	18.3	-18.1	-2.6			
13	280	3.4	3.3	-0.6	257	2.6	2.5	0.6	268	2.3	2.3	0.1	192	1.4	0.3	1.4	95	5.8	-5.8	0.5	79	10.1	-9.9	-1.9	88	19.1	-19.1	-0.8			
14	230	5.5	4.2	3.5	260	2.3	2.3	0.4	274	1.5	1.5	-0.1	186	0.9	0.1	0.9	109	3.6	-3.4	1.2	90	9.4	-9.4	0.0	87	16.1	-16.1	-0.9			
15	198	2.0	0.6	1.9	249	1.4	1.3	0.5	298	1.5	1.3	-0.7	194	0.8	0.2	0.8	114	3.9	-3.6	1.6	85	8.1	-8.1	-0.7	86	16.9	-16.9	-1.3			
16	205	3.3	1.4	3.0	225	1.4	1.0	1.0	292	1.8	1.7	-0.7	270	0.4	0.4	0.0	104	3.6	-3.5	0.9	91	8.6	-8.6	0.2	86	14.7	-14.7	-0.9			
17	215	4.7	2.7	3.8	229	2.0	1.5	1.3	266	1.4	1.4	0.1	141	2.6	-1.6	2.0	103	4.7	-4.6	1.1	91	7.9	-7.9	0.1	87	15.5	-15.5	-0.8			
18	234	3.9	3.2	2.3	217	1.5	0.9	1.2	219	1.4	0.9	1.1	185	2.3	0.2	2.3	118	3.4	-3.0	1.6	79	6.2	-6.1	-1.2	87	13.6	-13.6	-0.8			
19	207	1.3	0.6	1.2	225	0.1	0.1	0.1	297	0.7	0.6	-0.3	148	1.5	-0.8	1.3	124	4.7	-3.9	2.6	109	6.5	-6.2	2.1	88	14.3	-14.3	-0.5			
20	153	2.0	-0.9	1.8	65	1.4	-1.3	-0.6	63	1.8	-1.6	-0.8	108	3.6	-3.4	1.1	113	5.1	-4.7	2.0	101	6.7	-6.6	1.3	96	14.8	-14.7	1.5			
21	153	2.2	-1.0	2.0	108	0.9	-0.9	0.3	105	1.1	-1.1	0.3	113	2.6	-2.4	1.0	102	4.8	-4.7	1.0	84	8.2	-8.2	-0.9	91	14.9	-14.9	0.3			
22	151	1.3	-0.6	1.1	114	1.2	-1.1	0.5	99	1.2	-1.2	0.2	117	2.9	-2.6	1.3	97	3.3	-3.3	0.4	92	6.7	-6.7	0.2	83	15.4	-15.3	-1.9			
23	227	1.9	1.4	1.3	175	1.2	-0.1	1.2	59	0.6	-0.5	-0.3	113	2.3	-2.1	0.9	99	4.3	-4.2	0.7	100	5.9	-5.8	1.0	85	14.4	-14.3	-1.2			
24	169	1.5	-0.3	1.5	142	1.1	-0.7	0.9	113	0.8	-0.7	0.3	141	1.4	-0.9	1.1	106	4.8	-4.6	1.3	90	6.3	-6.3	0.0	85	12.4	-12.4	-1.1			
25	282	2.4	2.3	-0.5	323	0.5	0.3	-0.4	318	1.2	0.8	-0.9	47	1.9	-1.4	-1.3	140	2.6	-1.7	2.0	105	5.7	-5.5	1.5	88	11.1	-11.1	-0.3			
26	258	3.5	3.4	0.7	266	1.5	1.5	0.1	264	1.9	1.9	0.2	222	2.4	1.6	1.8	135	2.4	-1.7	1.7	118	4.2	-3.7	2.0	88	12.9	-12.9	-0.4			
27	212	1.5	0.8	1.3	321	1.4	0.9	-1.1	325	1.9	1.1	-1.6	284	0.4	0.4	-0.1	118	2.7	-2.4	1.3	107	7.4	-7.1	2.2	95	10.5	-10.5	0.9			
28	220	1.6	1.0	1.2	332	1.7	0.8	-1.5	350	2.7	0.5	-2.7	189	0.6	0.1	0.6	127	3.9	-3.1	2.3	114	5.7	-5.2	2.3	89	10.0	-10.0	-0.1			
29	164	1.5	-0.4	1.4	343	1.4	0.4	-1.3	349	1.6	0.3	-1.6	241	1.3	1.1	0.6	132	4.2	-3.1	2.8	131	4.9	-3.7	3.2	90	12.8	-12.8	0.0			
30	99	0.6	-0.6	0.1	35	1.6	-0.9	-1.3	72	0.6	-0.6	-0.2	238	0.9	0.8	0.5	134	3.0	-2.2	2.1	127	5.3	-4.2	3.2	96	11.5	-11.4	1.1			

Daily Normals of Upper Air Winds (1971-2000)

BHUBANESHWAR

OCTOBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	135	0.8	-0.6	0.6	94	1.3	-1.3	0.1	243	0.2	0.2	0.1	167	0.9	-0.2	0.9	135	3.8	-2.7	2.7	141	3.6	-2.3	2.8	102	9.7	-9.5	2.0			
2	124	0.4	-0.3	0.2	54	1.9	-1.5	-1.1	9	1.8	-0.3	-1.8	100	1.1	-1.1	0.2	152	2.6	-1.2	2.3	139	5.2	-3.4	3.9	115	10.0	-9.1	4.2			
3	169	1.5	-0.3	1.5	87	3.7	-3.7	-0.2	180	0.1	0.0	0.1	171	1.3	-0.2	1.3	158	4.1	-1.5	3.8	143	3.9	-2.3	3.1	91	10.2	-10.2	0.2			
4	149	2.6	-1.3	2.2	119	1.3	-1.1	0.6	63	0.4	-0.4	-0.2	207	2.2	1.0	2.0	175	3.4	-0.3	3.4	135	4.5	-3.2	3.2	106	10.4	-10.0	2.9			
5	121	2.6	-2.2	1.3	97	0.8	-0.8	0.1	225	0.1	0.1	0.1	217	2.6	1.6	2.1	164	4.0	-1.1	3.8	135	1.8	-1.3	1.3	116	8.9	-8.0	3.9			
6	107	2.1	-2.0	0.6	90	1.1	-1.1	0.0	18	0.6	-0.2	-0.6	238	1.3	1.1	0.7	160	2.9	-1.0	2.7	112	3.5	-3.2	1.3	93	9.0	-9.0	0.5			
7	88	3.4	-3.4	-0.1	58	0.9	-0.8	-0.5	319	0.9	0.6	-0.7	262	0.7	0.7	0.1	229	2.3	1.7	1.5	188	3.5	0.5	3.5	121	7.5	-6.4	3.9			
8	145	3.8	-2.2	3.1	90	0.1	-0.1	0.0	288	0.3	0.3	-0.1	219	2.2	1.4	1.7	226	3.9	2.8	2.7	196	3.2	0.9	3.1	88	6.1	-6.1	-0.2			
9	126	2.6	-2.1	1.5	77	0.9	-0.9	-0.2	324	0.9	0.5	-0.7	247	2.3	2.1	0.9	224	2.8	1.9	2.0	196	4.3	1.2	4.1	100	7.7	-7.6	1.3			
10	134	3.5	-2.5	2.4	48	1.3	-1.0	-0.9	360	0.6	0.0	-0.6	307	0.5	0.4	-0.3	209	1.8	0.9	1.6	195	2.3	0.6	2.2	132	6.0	-4.5	4.0			
11	121	2.3	-2.0	1.2	38	1.6	-1.0	-1.3	319	0.9	0.6	-0.7	236	0.4	0.3	0.2	197	2.4	0.7	2.3	144	3.7	-2.2	3.0	98	8.5	-8.4	1.2			
12	96	2.0	-2.0	0.2	5	2.3	-0.2	-2.3	9	2.6	-0.4	-2.6	29	1.3	-0.6	-1.1	214	2.3	1.3	1.9	185	4.7	0.4	4.7	110	8.0	-7.5	2.7			
13	111	3.6	-3.4	1.3	14	3.3	-0.8	-3.2	354	2.9	0.3	-2.9	345	1.6	0.4	-1.5	238	3.2	2.7	1.7	197	6.6	1.9	6.3	127	5.9	-4.7	3.5			
14	64	2.5	-2.3	-1.1	27	4.0	-1.8	-3.6	3	2.2	-0.1	-2.2	261	1.2	1.2	0.2	215	3.9	2.2	3.2	173	5.0	-0.6	5.0	118	8.6	-7.6	4.1			
15	69	2.2	-2.1	-0.8	44	2.9	-2.0	-2.1	51	1.3	-1.0	-0.8	231	1.9	1.5	1.2	220	3.4	2.2	2.6	192	5.8	1.2	5.7	114	5.4	-4.9	2.2			
16	114	1.7	-1.6	0.7	37	2.0	-1.2	-1.6	45	0.3	-0.2	-0.2	254	1.5	1.4	0.4	230	4.5	3.5	2.9	211	5.5	2.8	4.7	115	5.3	-4.8	2.2			
17	61	4.3	-3.8	-2.1	52	2.9	-2.3	-1.8	34	0.7	-0.4	-0.6	172	1.5	-0.2	1.5	228	5.4	4.0	3.6	178	4.9	-0.2	4.9	136	6.7	-4.7	4.8			
18	63	1.8	-1.6	-0.8	63	1.8	-1.6	-0.8	225	0.1	0.1	0.1	246	1.2	1.1	0.5	244	5.0	4.5	2.2	243	6.1	5.4	2.8	117	5.8	-5.2	2.6			
19	47	1.8	-1.3	-1.2	45	0.3	-0.2	-0.2	333	1.3	0.6	-1.2	270	2.3	2.3	0.0	246	4.4	4.0	1.8	224	4.7	3.3	3.4	145	4.5	-2.6	3.7			
20	43	2.6	-1.8	-1.9	24	1.7	-0.7	-1.6	283	2.2	2.1	-0.5	261	3.6	3.6	0.6	253	6.6	6.3	1.9	238	9.9	8.4	5.2	141	1.9	-1.2	1.5			
21	43	1.6	-1.1	-1.2	13	2.2	-0.5	-2.1	285	2.7	2.6	-0.7	261	4.3	4.2	0.7	254	7.5	7.2	2.0	244	10.3	9.3	4.5	132	2.8	-2.1	1.9			
22	323	2.0	1.2	-1.6	2	2.4	-0.1	-2.4	310	2.6	2.0	-1.7	273	3.4	3.4	-0.2	250	7.4	7.0	2.5	245	11.8	10.7	5.0	228	4.3	3.2	2.9			
23	348	3.4	0.7	-3.3	11	3.1	-0.6	-3.0	333	2.5	1.1	-2.2	262	3.6	3.6	0.5	260	7.6	7.5	1.3	245	9.6	8.7	4.0	175	5.0	-0.4	5.0			
24	32	3.4	-1.8	-2.9	360	2.9	0.0	-2.9	283	2.2	2.1	-0.5	275	2.4	2.4	-0.2	260	7.4	7.3	1.3	247	9.0	8.3	3.5	189	4.7	0.7	4.6			
25	50	2.6	-2.0	-1.7	4	2.6	-0.2	-2.6	293	2.1	1.9	-0.8	267	4.2	4.2	0.2	253	9.0	8.6	2.7	249	10.8	10.1	3.9	215	2.8	1.6	2.3			
26	57	5.0	-4.2	-2.7	18	3.5	-1.1	-3.3	315	2.8	2.0	-2.0	274	5.3	5.3	-0.4	266	10.7	10.7	0.8	244	13.6	12.2	6.0	242	5.0	4.4	2.3			
27	56	4.5	-3.7	-2.5	25	4.2	-1.8	-3.8	315	2.8	2.0	-2.0	298	4.7	4.1	-2.2	272	10.4	10.4	-0.4	258	14.4	14.1	3.1	265	5.2	5.2	0.5			
28	16	4.0	-1.1	-3.8	27	3.1	-1.4	-2.8	336	1.2	0.5	-1.1	280	3.5	3.4	-0.6	259	10.8	10.6	2.1	246	10.7	9.8	4.4	226	6.8	4.9	4.7			
29	53	2.5	-2.0	-1.5	28	4.1	-1.9	-3.6	318	2.5	1.7	-1.9	257	5.7	5.6	1.3	253	11.3	10.8	3.4	248	11.4	10.6	4.2	238	3.2	2.7	1.7			
30	62	4.0	-3.5	-1.9	24	3.5	-1.4	-3.2	308	1.1	0.9	-0.7	251	4.3	4.1	1.4	250	9.9	9.3	3.3	241	11.8	10.3	5.7	210	4.6	2.3	4.0			
31	56	4.6	-3.8	-2.6	49	3.3	-2.5	-2.2	243	0.7	0.6	0.3	247	3.8	3.5	1.5	262	11.3	11.2	1.6	248	12.6	11.7	4.7	224	6.1	4.2	4.4			

Daily Normals of Upper Air Winds (1971-2000)

83

BHUBANESHWAR

NOVEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	58	4.4	-3.7	-2.3	46	3.0	-2.2	-2.1	266	1.4	1.4	0.1	248	5.5	5.1	2.1	251	11.0	10.4	3.5	248	13.9	12.8	5.3	236	6.0	5.0	3.4			
2	59	4.4	-3.8	-2.3	50	3.4	-2.6	-2.2	265	1.1	1.1	0.1	268	2.6	2.6	0.1	243	10.0	8.9	4.6	238	13.9	11.8	7.3	250	5.4	5.1	1.9			
3	60	6.7	-5.8	-3.3	52	3.9	-3.1	-2.4	260	2.8	2.8	0.5	269	4.2	4.2	0.1	258	11.6	11.3	2.5	237	16.9	14.2	9.2	242	7.5	6.6	3.5			
4	44	4.2	-2.9	-3.0	23	2.6	-1.0	-2.4	288	1.9	1.8	-0.6	268	4.8	4.8	0.2	259	13.6	13.3	2.7	247	16.8	15.5	6.5	241	7.9	6.9	3.9			
5	70	5.0	-4.7	-1.7	49	2.1	-1.6	-1.4	307	2.5	2.0	-1.5	272	6.7	6.7	-0.2	260	14.5	14.3	2.6	251	15.5	14.6	5.1	260	7.7	7.6	1.4			
6	71	4.6	-4.3	-1.5	34	2.7	-1.5	-2.2	299	3.1	2.7	-1.5	284	6.0	5.8	-1.4	261	12.4	12.2	2.0	254	18.6	17.9	5.2	250	10.0	9.4	3.5			
7	77	4.7	-4.6	-1.1	29	3.7	-1.8	-3.2	338	2.4	0.9	-2.2	294	4.4	4.0	-1.8	266	12.1	12.1	0.9	254	15.1	14.5	4.2	255	7.4	7.2	1.9			
8	72	2.6	-2.5	-0.8	13	4.6	-1.0	-4.5	336	4.2	1.7	-3.8	287	6.7	6.4	-1.9	263	12.7	12.6	1.5	250	16.4	15.5	5.5	260	8.8	8.7	1.5			
9	63	0.9	-0.8	-0.4	22	3.5	-1.3	-3.2	326	3.7	2.1	-3.1	281	7.2	7.1	-1.4	267	13.0	13.0	0.6	246	17.4	15.9	7.0	234	7.5	6.1	4.4			
10	66	2.0	-1.8	-0.8	22	2.7	-1.0	-2.5	335	3.3	1.4	-3.0	279	6.8	6.7	-1.1	267	14.9	14.9	0.9	252	17.0	16.2	5.2	240	9.8	8.5	4.9			
11	45	2.3	-1.6	-1.6	23	3.0	-1.2	-2.8	308	4.2	3.3	-2.6	291	7.5	7.0	-2.7	272	14.6	14.6	-0.4	251	16.6	15.7	5.3	255	7.4	7.2	1.9			
12	71	3.4	-3.2	-1.1	24	3.0	-1.2	-2.7	289	2.1	2.0	-0.7	285	4.8	4.6	-1.2	260	15.3	15.1	2.7	256	21.6	21.0	5.2	251	10.0	9.5	3.2			
13	64	2.5	-2.3	-1.1	29	2.1	-1.0	-1.8	289	3.4	3.2	-1.1	284	6.8	6.6	-1.6	269	17.5	17.5	0.2	253	18.8	18.0	5.5	255	10.0	9.7	2.6			
14	77	4.7	-4.6	-1.1	20	3.2	-1.1	-3.0	313	3.5	2.6	-2.4	279	4.3	4.2	-0.7	271	15.0	15.0	-0.2	250	18.3	17.2	6.2	263	8.8	8.7	1.1			
15	61	4.6	-4.0	-2.2	18	3.2	-1.0	-3.0	335	2.9	1.2	-2.6	292	5.5	5.1	-2.1	265	13.7	13.6	1.3	252	17.2	16.4	5.2	254	8.5	8.2	2.4			
16	59	4.2	-3.6	-2.2	26	2.5	-1.1	-2.3	310	2.6	2.0	-1.7	291	5.1	4.8	-1.8	275	12.7	12.7	-1.1	255	16.9	16.3	4.5	231	5.6	4.4	3.5			
17	67	3.0	-2.8	-1.2	13	2.8	-0.6	-2.7	333	2.8	1.3	-2.5	282	6.3	6.2	-1.3	262	16.2	16.0	2.3	246	19.3	17.7	7.8	246	8.2	7.5	3.4			
18	62	3.2	-2.8	-1.5	21	3.3	-1.2	-3.1	318	2.7	1.8	-2.0	272	7.8	7.8	-0.3	256	16.1	15.6	4.0	242	19.2	16.9	9.1	253	9.7	9.3	2.8			
19	38	4.1	-2.5	-3.2	20	4.1	-1.4	-3.9	317	3.4	2.3	-2.5	269	8.1	8.1	0.1	256	18.4	17.9	4.4	232	22.6	17.8	13.9	231	8.2	6.4	5.1			
20	41	3.7	-2.4	-2.8	6	3.6	-0.4	-3.6	330	3.8	1.9	-3.3	290	8.0	7.5	-2.7	256	17.4	16.9	4.1	237	20.7	17.4	11.2	249	12.3	11.5	4.5			
21	38	5.1	-3.1	-4.0	3	3.4	-0.2	-3.4	314	3.5	2.5	-2.4	270	6.9	6.9	0.0	252	17.0	16.2	5.3	236	20.2	16.7	11.4	256	10.8	10.5	2.7			
22	35	2.8	-1.6	-2.3	22	2.9	-1.1	-2.7	311	2.9	2.2	-1.9	254	7.8	7.5	2.2	253	19.3	18.4	5.8	234	21.9	17.8	12.8	255	9.4	9.1	2.5			
23	53	2.5	-2.0	-1.5	25	3.1	-1.3	-2.8	328	1.9	1.0	-1.6	262	6.6	6.5	0.9	258	16.1	15.8	3.3	238	21.0	17.8	11.1	252	12.3	11.7	3.7			
24	5	3.3	-0.3	-3.3	6	2.8	-0.3	-2.8	286	2.9	2.8	-0.8	268	8.2	8.2	0.3	267	14.3	14.3	0.8	249	20.3	18.9	7.4	245	11.2	10.2	4.7			
25	2	3.6	-0.1	-3.6	13	3.6	-0.8	-3.5	305	3.7	3.0	-2.1	285	7.3	7.1	-1.9	267	16.8	16.8	0.8	251	18.9	17.9	6.2	262	12.2	12.1	1.8			
26	351	2.0	0.3	-2.0	7	3.5	-0.4	-3.5	288	3.5	3.3	-1.1	287	7.5	7.2	-2.2	263	14.7	14.6	1.7	249	18.9	17.6	6.8	242	11.0	9.7	5.1			
27	7	3.3	-0.4	-3.3	360	3.9	0.0	-3.9	311	4.0	3.0	-2.6	279	8.0	7.9	-1.2	265	16.9	16.8	1.6	251	18.4	17.4	6.0	259	10.2	10.0	1.9			
28	21	4.0	-1.4	-3.7	360	4.1	0.0	-4.1	293	3.8	3.5	-1.5	280	9.6	9.5	-1.6	263	16.7	16.6	2.0	246	21.5	19.6	8.9	248	7.9	7.3	3.0			
29	40	2.5	-1.6	-1.9	350	4.0	0.7	-3.9	302	4.7	4.0	-2.5	274	10.3	10.3	-0.7	258	17.6	17.2	3.8	251	21.7	20.5	7.1	242	7.8	6.9	3.6			
30	54	3.1	-2.5	-1.8	7	3.1	-0.4	-3.1	293	3.6	3.3	-1.4	284	9.9	9.6	-2.4	259	18.0	17.7	3.4	242	20.1	17.7	9.6	242	7.3	6.5	3.4			

Daily Normals of Upper Air Winds (1971-2000)

84

BHUBANESHWAR

DECEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	16	3.2	-0.9	-3.1	355	3.2	0.3	-3.2	294	5.2	4.8	-2.1	280	10.4	10.2	-1.8	266	19.8	19.8	1.4	243	22.2	19.8	10.1	231	8.7	6.7	5.5			
2	13	2.8	-0.6	-2.7	6	2.9	-0.3	-2.9	288	4.8	4.6	-1.5	283	10.2	9.9	-2.3	264	19.1	19.0	2.0	244	22.8	20.5	10.0	259	9.9	9.7	1.8			
3	22	3.5	-1.3	-3.2	351	3.7	0.6	-3.7	304	6.1	5.1	-3.4	281	10.1	9.9	-2.0	260	17.5	17.3	2.9	255	22.6	21.8	6.0	262	8.0	7.9	1.1			
4	31	2.7	-1.4	-2.3	353	3.8	0.5	-3.8	310	5.4	4.1	-3.5	278	9.1	9.0	-1.3	264	18.3	18.2	1.9	248	23.0	21.3	8.7	276	11.0	10.9	-1.1			
5	2	2.4	-0.1	-2.4	338	3.1	1.2	-2.9	311	4.0	3.0	-2.6	277	8.0	7.9	-1.0	257	18.2	17.7	4.1	244	22.3	20.0	9.8	243	10.3	9.2	4.6			
6	20	3.7	-1.3	-3.5	357	3.6	0.2	-3.6	310	5.1	3.9	-3.3	278	8.7	8.6	-1.2	262	18.2	18.0	2.6	244	22.6	20.4	9.8	248	13.0	12.1	4.8			
7	354	2.7	0.3	-2.7	357	3.8	0.2	-3.8	330	5.6	2.8	-4.8	283	8.3	8.1	-1.8	268	18.4	18.4	0.7	252	23.3	22.2	7.2	247	7.8	7.2	3.1			
8	337	2.1	0.8	-1.9	351	3.2	0.5	-3.2	320	4.8	3.1	-3.7	282	8.8	8.6	-1.8	270	16.8	16.8	0.1	262	22.6	22.4	3.0	249	13.1	12.2	4.7			
9	19	2.4	-0.8	-2.3	11	3.2	-0.6	-3.1	320	4.5	2.9	-3.5	274	10.4	10.4	-0.7	266	19.6	19.6	1.4	253	23.4	22.3	7.0	259	15.8	15.5	3.0			
10	346	3.0	0.7	-2.9	333	3.8	1.7	-3.4	305	6.8	5.6	-3.9	278	10.3	10.2	-1.5	269	20.5	20.5	0.5	255	24.1	23.3	6.3	257	10.9	10.6	2.5			
11	358	2.3	0.1	-2.3	334	3.0	1.3	-2.7	303	5.9	5.0	-3.2	281	11.8	11.6	-2.3	266	21.2	21.2	1.4	258	25.3	24.8	5.1	277	13.2	13.1	-1.5			
12	27	2.2	-1.0	-2.0	333	2.9	1.3	-2.6	297	5.6	5.0	-2.5	285	11.6	11.2	-3.0	269	21.5	21.5	0.2	255	23.1	22.4	5.8	262	16.0	15.8	2.3			
13	336	2.2	0.9	-2.0	324	4.1	2.4	-3.3	293	5.3	4.9	-2.1	283	10.7	10.4	-2.4	263	23.3	23.1	2.8	255	25.6	24.8	6.5	246	15.1	13.8	6.2			
14	351	3.1	0.5	-3.1	324	3.7	2.2	-3.0	306	5.1	4.1	-3.0	278	11.5	11.4	-1.6	259	21.5	21.1	4.0	252	26.4	25.1	8.3	257	14.8	14.4	3.2			
15	13	2.7	-0.6	-2.6	345	3.0	0.8	-2.9	300	5.9	5.1	-2.9	281	11.9	11.7	-2.2	267	21.6	21.6	1.3	262	24.4	24.2	3.3	270	14.9	14.9	0.1			
16	42	3.1	-2.1	-2.3	351	2.4	0.4	-2.4	300	5.2	4.5	-2.6	283	11.2	10.9	-2.6	269	22.1	22.1	0.4	261	24.3	24.0	3.6	254	13.6	13.1	3.8			
17	8	3.4	-0.5	-3.4	348	2.4	0.5	-2.3	302	5.5	4.7	-2.9	273	9.8	9.8	-0.5	267	24.3	24.3	1.4	248	30.9	28.6	11.8	256	13.3	12.9	3.3			
18	353	2.4	0.3	-2.4	339	3.3	1.2	-3.1	307	6.9	5.5	-4.1	280	12.3	12.1	-2.2	271	21.5	21.5	-0.3	257	29.2	28.4	6.7	261	16.0	15.8	2.4			
19	13	2.2	-0.5	-2.1	345	3.0	0.8	-2.9	309	6.3	4.9	-3.9	276	12.3	12.2	-1.2	263	22.4	22.2	2.8	257	27.6	26.8	6.4	263	17.9	17.8	2.2			
20	347	1.3	0.3	-1.3	338	2.7	1.0	-2.5	304	5.7	4.7	-3.2	276	12.0	11.9	-1.2	263	20.8	20.7	2.4	249	30.8	28.7	11.3	269	15.6	15.6	0.4			
21	42	1.2	-0.8	-0.9	341	3.4	1.1	-3.2	305	6.7	5.5	-3.9	284	13.2	12.8	-3.1	264	21.9	21.8	2.2	256	30.4	29.5	7.4	279	13.9	13.7	-2.2			
22	330	1.6	0.8	-1.4	338	4.1	1.5	-3.8	301	6.2	5.3	-3.2	285	14.3	13.8	-3.6	269	26.0	26.0	0.5	259	26.0	25.5	5.1	275	10.6	10.6	-1.0			
23	322	2.4	1.5	-1.9	346	3.4	0.8	-3.3	291	7.2	6.7	-2.6	264	13.5	13.4	1.3	261	25.3	25.0	4.0	254	27.1	26.1	7.4	266	16.3	16.3	1.1			
24	191	0.5	0.1	0.5	333	2.7	1.2	-2.4	290	6.3	5.9	-2.1	271	13.2	13.2	-0.3	264	28.0	27.8	2.9	258	30.9	30.3	6.3	261	15.3	15.1	2.5			
25	331	1.0	0.5	-0.9	338	2.2	0.8	-2.0	291	5.9	5.5	-2.1	277	13.3	13.2	-1.6	268	23.8	23.8	0.8	260	30.0	29.5	5.3	261	22.0	21.7	3.6			
26	351	2.5	0.4	-2.5	320	3.8	2.4	-2.9	293	5.3	4.9	-2.1	274	12.9	12.9	-0.9	268	25.5	25.5	0.9	252	28.5	27.1	8.7	255	16.9	16.3	4.4			
27	32	1.9	-1.0	-1.6	334	3.2	1.4	-2.9	292	5.4	5.0	-2.0	279	11.4	11.3	-1.7	275	24.7	24.6	-2.2	263	27.2	27.0	3.1	261	16.3	16.1	2.5			
28	31	1.7	-0.9	-1.5	328	1.9	1.0	-1.6	278	6.1	6.0	-0.8	270	15.0	15.0	0.0	271	23.6	23.6	-0.4	264	25.7	25.5	2.9	262	17.9	17.7	2.6			
29	10	1.7	-0.3	-1.7	324	3.1	1.8	-2.5	289	7.3	6.9	-2.4	274	15.4	15.4	-1.1	270	26.1	26.1	0.0	264	30.2	30.0	3.2	263	15.7	15.6	2.0			
30	79	1.0	-1.0	-0.2	329	4.4	2.3	-3.8	295	8.1	7.4	-3.4	278	17.3	17.1	-2.3	271	25.7	25.7	-0.5	264	27.4	27.2	3.0	264	17.9	17.8	1.8			
31	86	1.6	-1.6	-0.1	312	2.7	2.0	-1.8	303	8.3	7.0	-4.5	282	16.0	15.7	-3.3	274	26.4	26.3	-1.8	263	29.4	29.2	3.4	261	22.0	21.7	3.6			

Daily Normals of Upper Air Winds (1971-2000)

CHENNAI

JANUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	47	6.0	-4.4	-4.1	46	3.6	-2.6	-2.5	53	2.1	-1.7	-1.3	80	1.1	-1.1	-0.2	244	5.5	4.9	2.4	232	8.5	6.7	5.2	150	2.4	-1.2	2.1
2	34	6.2	-3.5	-5.1	38	3.1	-1.9	-2.4	63	1.8	-1.6	-0.8	351	1.3	0.2	-1.3	253	5.8	5.5	1.7	223	8.5	5.8	6.2	122	1.9	-1.6	1.0
3	41	6.9	-4.5	-5.2	37	4.4	-2.6	-3.5	42	2.4	-1.6	-1.8	9	1.3	-0.2	-1.3	253	5.4	5.2	1.6	230	9.4	7.2	6.1	135	0.4	-0.3	0.3
4	37	6.9	-4.1	-5.5	52	5.2	-4.1	-3.2	69	2.2	-2.1	-0.8	18	0.6	-0.2	-0.6	264	4.7	4.7	0.5	222	9.2	6.2	6.8	268	2.8	2.8	0.1
5	36	6.2	-3.6	-5.0	39	4.6	-2.9	-3.6	46	3.3	-2.4	-2.3	79	0.5	-0.5	-0.1	260	6.2	6.1	1.1	227	10.9	8.0	7.4	228	4.2	3.1	2.8
6	37	6.4	-3.9	-5.1	54	5.3	-4.3	-3.1	60	2.2	-1.9	-1.1	259	1.0	1.0	0.2	243	8.5	7.6	3.8	231	10.9	8.4	6.9	196	6.0	1.7	5.8
7	50	5.3	-4.1	-3.4	56	5.7	-4.7	-3.2	58	1.3	-1.1	-0.7	264	1.0	1.0	0.1	239	8.2	7.1	4.2	238	11.0	9.3	5.8	233	3.0	2.4	1.8
8	42	6.0	-4.0	-4.5	55	4.2	-3.4	-2.4	45	0.7	-0.5	-0.5	325	1.2	0.7	-1.0	244	7.2	6.5	3.2	239	13.9	11.9	7.2	237	6.7	5.6	3.7
9	48	5.7	-4.2	-3.8	46	3.6	-2.6	-2.5	66	1.2	-1.1	-0.5	304	1.8	1.5	-1.0	247	7.4	6.8	2.9	236	10.1	8.4	5.6	238	3.9	3.3	2.1
10	54	5.7	-4.6	-3.3	38	4.1	-2.5	-3.2	75	1.1	-1.1	-0.3	236	0.7	0.6	0.4	252	8.2	7.8	2.5	229	11.5	8.7	7.5	206	3.9	1.7	3.5
11	63	4.7	-4.2	-2.1	53	3.9	-3.1	-2.3	72	1.6	-1.5	-0.5	306	2.2	1.8	-1.3	251	8.6	8.1	2.8	239	10.1	8.7	5.2	220	3.5	2.3	2.7
12	45	3.8	-2.7	-2.7	53	4.1	-3.3	-2.5	58	1.3	-1.1	-0.7	311	2.3	1.7	-1.5	254	10.6	10.2	2.9	233	12.8	10.2	7.7	223	5.4	3.7	3.9
13	53	4.4	-3.5	-2.6	56	4.7	-3.9	-2.6	62	1.7	-1.5	-0.8	309	1.4	1.1	-0.9	263	10.2	10.1	1.2	241	13.4	11.7	6.5	220	4.3	2.8	3.3
14	65	5.0	-4.5	-2.1	65	4.5	-4.1	-1.9	96	1.0	-1.0	0.1	277	2.3	2.3	-0.3	268	9.9	9.9	0.3	234	12.3	9.9	7.3	246	2.0	1.8	0.8
15	80	2.9	-2.9	-0.5	70	4.1	-3.9	-1.4	112	1.8	-1.7	0.7	300	2.2	1.9	-1.1	265	10.3	10.3	0.9	230	11.6	8.9	7.5	265	2.2	2.2	0.2
16	60	3.2	-2.8	-1.6	69	3.9	-3.6	-1.4	52	1.8	-1.4	-1.1	249	2.2	2.1	0.8	258	9.7	9.5	2.1	240	11.6	10.1	5.8	195	3.5	0.9	3.4
17	38	4.8	-3.0	-3.8	54	4.4	-3.6	-2.6	84	1.0	-1.0	-0.1	310	2.6	2.0	-1.7	262	8.5	8.4	1.2	240	9.5	8.2	4.8	180	2.4	0.0	2.4
18	41	6.1	-4.0	-4.6	52	4.7	-3.7	-2.9	357	1.7	0.1	-1.7	294	2.7	2.5	-1.1	249	7.6	7.1	2.7	236	9.4	7.8	5.2	200	2.0	0.7	1.9
19	54	4.6	-3.7	-2.7	50	4.2	-3.2	-2.7	349	2.1	0.4	-2.1	308	3.4	2.7	-2.1	264	8.2	8.2	0.8	231	11.9	9.3	7.4	256	1.6	1.6	0.4
20	56	4.1	-3.4	-2.3	42	4.8	-3.2	-3.6	11	2.1	-0.4	-2.1	321	3.6	2.3	-2.8	260	9.7	9.5	1.7	236	11.0	9.1	6.2	126	1.9	-1.5	1.1
21	57	3.3	-2.8	-1.8	61	4.9	-4.3	-2.4	25	3.3	-1.4	-3.0	288	2.8	2.7	-0.9	248	7.4	6.9	2.8	235	11.3	9.2	6.5	173	3.8	-0.5	3.8
22	61	3.8	-3.3	-1.8	65	5.2	-4.7	-2.2	29	3.3	-1.6	-2.9	328	2.6	1.4	-2.2	257	7.9	7.7	1.8	228	8.0	5.9	5.4	152	2.4	-1.1	2.1
23	51	5.4	-4.2	-3.4	53	5.6	-4.5	-3.4	44	3.0	-2.1	-2.2	337	2.8	1.1	-2.6	262	7.3	7.2	1.0	232	9.3	7.3	5.7	244	2.5	2.3	1.1
24	53	4.9	-3.9	-2.9	57	6.3	-5.3	-3.4	46	4.0	-2.9	-2.8	329	1.2	0.6	-1.0	268	7.5	7.5	0.2	238	7.6	6.5	4.0	243	1.8	1.6	0.8
25	52	4.8	-3.8	-3.0	52	5.6	-4.4	-3.4	45	3.7	-2.6	-2.6	351	1.2	0.2	-1.2	279	5.3	5.2	-0.8	227	6.9	5.0	4.7	137	4.0	-2.7	2.9
26	55	5.7	-4.7	-3.3	54	4.8	-3.9	-2.8	30	2.4	-1.2	-2.1	294	2.4	2.2	-1.0	277	6.2	6.1	-0.8	243	8.0	7.1	3.6	168	1.9	-0.4	1.9
27	55	6.3	-5.2	-3.6	55	4.9	-4.0	-2.8	39	2.7	-1.7	-2.1	351	2.5	0.4	-2.5	252	6.6	6.3	2.0	231	9.7	7.6	6.1	142	2.3	-1.4	1.8
28	46	6.2	-4.5	-4.3	50	5.0	-3.8	-3.2	39	2.2	-1.4	-1.7	349	2.0	0.4	-2.0	257	6.1	5.9	1.4	222	10.2	6.8	7.6	202	4.5	1.7	4.2
29	47	5.0	-3.6	-3.4	53	5.3	-4.2	-3.2	46	3.2	-2.3	-2.2	355	3.3	0.3	-3.3	257	5.7	5.5	1.3	247	9.2	8.5	3.6	243	5.6	5.0	2.6
30	56	4.1	-3.4	-2.3	63	3.3	-2.9	-1.5	29	2.3	-1.1	-2.0	326	2.5	1.4	-2.1	259	6.1	6.0	1.2	225	10.8	7.6	7.7	292	3.2	3.0	-1.2
31	63	4.4	-3.9	-2.0	60	4.4	-3.8	-2.2	43	2.6	-1.8	-1.9	327	3.1	1.7	-2.6	255	8.3	8.0	2.1	249	10.5	9.8	3.8	250	5.3	5.0	1.8

Daily Normals of Upper Air Winds (1971-2000)

CHENNAI

FEBRUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	61	4.3	-3.8	-2.1	52	4.1	-3.2	-2.5	50	2.6	-2.0	-1.7	313	2.1	1.5	-1.4	252	9.4	8.9	2.9	254	11.8	11.4	3.2	215	3.3	1.9	2.7
2	62	4.0	-3.5	-1.9	54	4.3	-3.5	-2.5	35	1.9	-1.1	-1.6	293	2.8	2.6	-1.1	263	9.7	9.6	1.2	244	10.6	9.5	4.6	233	4.5	3.6	2.7
3	58	4.7	-4.0	-2.5	58	3.9	-3.3	-2.1	5	1.2	-0.1	-1.2	284	4.2	4.1	-1.0	258	10.2	10.0	2.2	244	12.8	11.5	5.7	260	4.0	3.9	0.7
4	63	4.8	-4.3	-2.2	64	3.7	-3.3	-1.6	19	1.8	-0.6	-1.7	283	4.4	4.3	-1.0	269	9.3	9.3	0.1	242	9.3	8.2	4.3	268	5.2	5.2	0.2
5	73	4.5	-4.3	-1.3	42	3.6	-2.4	-2.7	15	2.4	-0.6	-2.3	272	3.2	3.2	-0.1	260	8.4	8.3	1.4	244	9.8	8.8	4.3	278	5.1	5.1	-0.7
6	66	3.5	-3.2	-1.4	60	4.0	-3.5	-2.0	360	2.3	0.0	-2.3	284	3.8	3.7	-0.9	255	9.6	9.3	2.5	238	11.4	9.7	6.0	262	7.6	7.5	1.0
7	77	3.2	-3.1	-0.7	60	4.4	-3.8	-2.2	18	1.9	-0.6	-1.8	316	3.0	2.1	-2.2	265	9.2	9.2	0.8	255	11.1	10.7	2.8	284	1.6	1.6	-0.4
8	100	3.4	-3.3	0.6	54	3.4	-2.8	-2.0	307	1.5	1.2	-0.9	312	3.8	2.8	-2.5	249	11.6	10.8	4.2	255	11.7	11.3	3.0	252	3.2	3.0	1.0
9	111	3.1	-2.9	1.1	48	3.6	-2.7	-2.4	355	3.2	0.3	-3.2	307	3.9	3.1	-2.3	253	11.0	10.5	3.2	254	11.2	10.8	3.0	264	4.9	4.9	0.5
10	85	2.5	-2.5	-0.2	57	3.7	-3.1	-2.0	15	3.0	-0.8	-2.9	318	3.9	2.6	-2.9	266	9.4	9.4	0.6	247	12.7	11.7	4.9	234	3.6	2.9	2.1
11	68	4.3	-4.0	-1.6	60	4.6	-4.0	-2.3	13	3.1	-0.7	-3.0	313	2.3	1.7	-1.6	274	8.1	8.1	-0.5	237	10.8	9.1	5.8	270	0.8	0.8	0.0
12	59	3.1	-2.7	-1.6	61	4.7	-4.1	-2.3	37	3.4	-2.0	-2.7	347	2.2	0.5	-2.1	276	7.5	7.5	-0.8	239	10.8	9.2	5.6	267	3.6	3.6	0.2
13	60	3.9	-3.4	-2.0	56	4.1	-3.4	-2.3	59	2.9	-2.5	-1.5	330	1.4	0.7	-1.2	263	8.1	8.0	1.0	243	8.0	7.2	3.6	260	1.7	1.7	0.3
14	73	3.9	-3.7	-1.1	67	4.0	-3.7	-1.6	21	1.9	-0.7	-1.8	277	1.7	1.7	-0.2	266	7.8	7.8	0.5	221	7.7	5.1	5.8	176	2.8	-0.2	2.8
15	67	3.6	-3.3	-1.4	52	2.9	-2.3	-1.8	13	2.2	-0.5	-2.1	283	2.7	2.6	-0.6	266	7.6	7.6	0.5	226	6.9	5.0	4.8	251	2.1	2.0	0.7
16	69	2.8	-2.6	-1.0	48	2.5	-1.9	-1.7	27	1.1	-0.5	-1.0	283	2.8	2.7	-0.6	253	6.2	5.9	1.8	232	9.7	7.6	6.0	215	3.2	1.8	2.6
17	95	2.5	-2.5	0.2	68	3.5	-3.2	-1.3	45	1.0	-0.7	-0.7	291	3.4	3.2	-1.2	255	6.5	6.3	1.7	218	8.5	5.3	6.7	217	0.5	0.3	0.4
18	115	1.7	-1.5	0.7	75	3.0	-2.9	-0.8	22	1.1	-0.4	-1.0	302	4.0	3.4	-2.1	249	5.6	5.2	2.0	215	8.1	4.7	6.6	254	1.8	1.7	0.5
19	137	2.1	-1.4	1.5	80	1.7	-1.7	-0.3	34	1.8	-1.0	-1.5	300	2.4	2.1	-1.2	265	5.5	5.5	0.5	218	6.6	4.1	5.2	207	0.7	0.3	0.6
20	154	3.4	-1.5	3.1	67	3.3	-3.0	-1.3	5	2.4	-0.2	-2.4	315	2.7	1.9	-1.9	268	5.2	5.2	0.2	217	7.4	4.4	5.9	242	4.2	3.7	2.0
21	166	3.7	-0.9	3.6	65	4.4	-4.0	-1.9	13	2.6	-0.6	-2.5	309	2.1	1.6	-1.3	260	5.5	5.4	1.0	226	8.2	5.9	5.7	219	2.1	1.3	1.6
22	149	3.1	-1.6	2.7	69	3.0	-2.8	-1.1	13	2.3	-0.5	-2.2	320	1.6	1.0	-1.2	264	7.0	7.0	0.7	226	8.6	6.2	5.9	248	3.1	2.9	1.2
23	114	2.7	-2.5	1.1	71	3.6	-3.4	-1.2	42	2.4	-1.6	-1.8	311	2.0	1.5	-1.3	270	5.4	5.4	0.0	226	8.1	5.8	5.6	205	2.9	1.2	2.6
24	92	3.0	-3.0	0.1	72	4.1	-3.9	-1.3	31	3.7	-1.9	-3.2	311	1.1	0.8	-0.7	254	5.5	5.3	1.5	239	9.2	7.9	4.8	254	4.1	3.9	1.1
25	104	3.2	-3.1	0.8	64	3.0	-2.7	-1.3	35	4.0	-2.3	-3.3	315	1.6	1.1	-1.1	254	5.6	5.4	1.5	242	10.1	8.9	4.8	278	2.1	2.1	-0.3
26	79	2.1	-2.1	-0.4	74	3.5	-3.4	-1.0	29	4.8	-2.3	-4.2	338	1.1	0.4	-1.0	268	7.9	7.9	0.3	241	9.6	8.4	4.6	158	1.1	-0.4	1.0
27	87	3.6	-3.6	-0.2	65	3.5	-3.2	-1.5	41	4.3	-2.8	-3.2	273	2.2	2.2	-0.1	261	8.2	8.1	1.3	247	9.1	8.4	3.6	224	3.0	2.1	2.2
28	82	3.0	-3.0	-0.4	67	4.0	-3.7	-1.6	44	3.6	-2.5	-2.6	312	1.3	1.0	-0.9	265	6.4	6.4	0.6	246	7.1	6.5	2.9	227	2.3	1.7	1.6
29	67	5.1	-4.7	-2.0	51	5.7	-4.4	-3.6	62	6.4	-5.7	-3.0	58	4.5	-3.8	-2.4	233	1.5	1.2	0.9	182	8.7	0.3	8.7	126	3.4	-2.8	2.0

Daily Normals of Upper Air Winds (1971-2000)

CHENNAI

MARCH

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	98	4.2	-4.2	0.6	63	4.0	-3.6	-1.8	39	4.0	-2.5	-3.1	305	2.1	1.7	-1.2	268	6.9	6.9	0.3	242	9.5	8.4	4.4	210	1.6	0.8	1.4			
2	75	4.3	-4.2	-1.1	62	4.5	-4.0	-2.1	30	4.4	-2.2	-3.8	328	2.8	1.5	-2.4	262	6.9	6.8	1.0	247	8.5	7.8	3.3	185	2.5	0.2	2.5			
3	79	3.8	-3.7	-0.7	77	4.7	-4.6	-1.1	41	4.4	-2.9	-3.3	317	2.6	1.8	-1.9	264	6.3	6.3	0.7	230	9.2	7.0	5.9	254	5.8	5.6	1.6			
4	88	2.9	-2.9	-0.1	66	4.2	-3.8	-1.7	46	4.3	-3.1	-3.0	23	2.5	-1.0	-2.3	262	6.9	6.8	1.0	237	10.3	8.7	5.6	214	3.2	1.8	2.7			
5	83	3.5	-3.5	-0.4	83	4.0	-4.0	-0.5	41	4.0	-2.6	-3.0	333	0.7	0.3	-0.6	253	7.6	7.3	2.2	240	11.4	9.9	5.7	246	2.7	2.5	1.1			
6	104	2.5	-2.4	0.6	84	3.0	-3.0	-0.3	46	3.5	-2.5	-2.4	326	1.4	0.8	-1.2	260	7.6	7.5	1.3	252	10.2	9.7	3.1	264	1.9	1.9	0.2			
7	105	2.7	-2.6	0.7	84	3.6	-3.6	-0.4	40	3.5	-2.3	-2.7	19	2.4	-0.8	-2.3	268	7.2	7.2	0.3	247	9.6	8.9	3.7	304	2.5	2.1	-1.4			
8	132	3.0	-2.2	2.0	85	3.4	-3.4	-0.3	49	4.9	-3.7	-3.2	4	1.6	-0.1	-1.6	257	7.0	6.8	1.6	248	9.4	8.7	3.6	208	1.9	0.9	1.7			
9	124	2.9	-2.4	1.6	75	4.3	-4.2	-1.1	48	5.1	-3.8	-3.4	347	1.7	0.4	-1.7	271	8.0	8.0	-0.2	237	9.5	8.0	5.2	202	1.8	0.7	1.7			
10	124	4.2	-3.5	2.4	90	4.1	-4.1	0.0	52	4.9	-3.9	-3.0	346	0.4	0.1	-0.4	255	9.2	8.9	2.4	244	11.3	10.1	5.0	243	3.9	3.5	1.8			
11	141	4.1	-2.6	3.2	105	3.0	-2.9	0.8	50	5.2	-4.0	-3.4	287	1.4	1.3	-0.4	257	7.8	7.6	1.7	237	11.4	9.6	6.2	239	2.9	2.5	1.5			
12	136	3.6	-2.5	2.6	81	3.1	-3.1	-0.5	31	5.7	-2.9	-4.9	329	1.2	0.6	-1.0	260	7.9	7.8	1.4	251	11.6	11.0	3.8	225	2.7	1.9	1.9			
13	155	3.1	-1.3	2.8	81	4.0	-4.0	-0.6	33	5.4	-2.9	-4.5	304	2.2	1.8	-1.2	254	9.3	9.0	2.5	251	11.3	10.7	3.6	223	2.5	1.7	1.8			
14	134	3.2	-2.3	2.2	87	4.3	-4.3	-0.2	51	5.4	-4.2	-3.4	5	2.4	-0.2	-2.4	268	10.0	10.0	0.3	254	11.9	11.5	3.2	288	2.5	2.4	-0.8			
15	131	3.5	-2.6	2.3	89	4.0	-4.0	-0.1	55	5.5	-4.5	-3.2	43	3.3	-2.2	-2.4	266	6.9	6.9	0.5	248	9.6	8.9	3.6	208	1.7	0.8	1.5			
16	144	2.6	-1.5	2.1	85	4.2	-4.2	-0.4	49	6.2	-4.7	-4.1	38	1.6	-1.0	-1.3	252	6.5	6.2	2.0	247	12.1	11.1	4.7	108	0.9	-0.9	0.3			
17	153	4.0	-1.8	3.6	94	3.9	-3.9	0.3	51	6.3	-4.9	-3.9	337	1.3	0.5	-1.2	259	8.6	8.5	1.6	239	10.8	9.3	5.5	145	1.9	-1.1	1.6			
18	135	2.5	-1.8	1.8	87	4.3	-4.3	-0.2	41	5.7	-3.7	-4.3	354	1.0	0.1	-1.0	247	7.5	6.9	3.0	237	11.6	9.7	6.4	205	4.0	1.7	3.6			
19	132	3.1	-2.3	2.1	93	3.6	-3.6	0.2	46	6.5	-4.7	-4.5	3	1.8	-0.1	-1.8	244	8.4	7.5	3.7	239	10.3	8.8	5.3	238	2.5	2.1	1.3			
20	132	3.1	-2.3	2.1	94	3.2	-3.2	0.2	39	6.7	-4.2	-5.2	22	1.6	-0.6	-1.5	249	8.3	7.7	3.0	241	10.3	9.0	5.0	183	2.0	0.1	2.0			
21	126	3.1	-2.5	1.8	90	3.3	-3.3	0.0	50	7.3	-5.6	-4.7	360	1.3	0.0	-1.3	267	9.0	9.0	0.4	246	11.3	10.3	4.6	189	1.3	0.2	1.3			
22	141	2.6	-1.6	2.0	95	3.8	-3.8	0.3	47	7.1	-5.2	-4.9	336	1.0	0.4	-0.9	264	8.5	8.5	0.9	245	10.8	9.8	4.6	202	1.8	0.7	1.7			
23	155	2.9	-1.2	2.6	99	3.6	-3.6	0.6	55	6.0	-4.9	-3.4	335	2.9	1.2	-2.6	263	8.6	8.5	1.0	238	10.9	9.3	5.7	185	2.2	0.2	2.2			
24	152	3.4	-1.6	3.0	107	2.8	-2.7	0.8	58	6.1	-5.2	-3.2	279	1.3	1.3	-0.2	256	9.6	9.3	2.4	246	15.8	14.4	6.4	254	4.1	3.9	1.1			
25	164	2.9	-0.8	2.8	96	3.0	-3.0	0.3	42	5.7	-3.8	-4.2	278	1.4	1.4	-0.2	257	11.6	11.3	2.6	252	15.6	14.8	4.8	288	4.6	4.4	-1.4			
26	134	2.9	-2.1	2.0	98	2.8	-2.8	0.4	40	5.6	-3.6	-4.3	284	1.2	1.2	-0.3	254	11.8	11.4	3.2	247	13.0	12.0	5.1	267	4.2	4.2	0.2			
27	108	2.9	-2.8	0.9	73	2.7	-2.6	-0.8	44	5.9	-4.1	-4.3	25	1.9	-0.8	-1.7	265	8.5	8.5	0.8	266	9.5	9.5	0.7	266	2.6	2.6	0.2			
28	110	3.0	-2.8	1.0	81	3.1	-3.1	-0.5	47	6.4	-4.7	-4.4	37	2.1	-1.3	-1.7	269	7.3	7.3	0.1	246	9.3	8.5	3.7	259	0.5	0.5	0.1			
29	154	2.5	-1.1	2.3	113	2.6	-2.4	1.0	46	6.9	-4.9	-4.8	28	2.1	-1.0	-1.9	266	6.6	6.6	0.5	252	9.3	8.8	2.9	247	1.5	1.4	0.6			
30	165	3.5	-0.9	3.4	82	2.2	-2.2	-0.3	50	7.6	-5.8	-4.9	32	2.5	-1.3	-2.1	258	6.4	6.3	1.3	250	10.1	9.5	3.4	231	1.4	1.1	0.9			
31	121	2.1	-1.8	1.1	73	2.8	-2.7	-0.8	43	6.2	-4.2	-4.5	27	2.2	-1.0	-2.0	263	7.7	7.6	0.9	236	10.2	8.4	5.7	293	2.5	2.3	-1.0			

Daily Normals of Upper Air Winds (1971-2000)

CHENNAI

APRIL

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	131	3.0	-2.3	2.0	98	2.2	-2.2	0.3	55	6.8	-5.6	-3.9	63	2.7	-2.4	-1.2	252	5.1	4.8	1.6	230	8.3	6.4	5.3	263	2.3	2.3	0.3
2	141	4.4	-2.8	3.4	108	2.3	-2.2	0.7	48	7.2	-5.4	-4.8	63	1.6	-1.4	-0.7	261	5.4	5.3	0.8	240	9.1	7.9	4.6	198	1.3	0.4	1.2
3	138	5.0	-3.3	3.7	97	2.6	-2.6	0.3	53	6.2	-5.0	-3.7	108	0.3	-0.3	0.1	257	5.7	5.6	1.3	232	9.3	7.3	5.7	119	2.5	-2.2	1.2
4	125	3.9	-3.2	2.2	117	2.2	-2.0	1.0	48	6.4	-4.8	-4.3	18	0.3	-0.1	-0.3	262	7.8	7.7	1.1	246	9.5	8.7	3.8	155	1.7	-0.7	1.5
5	125	3.3	-2.7	1.9	120	2.4	-2.1	1.2	67	5.9	-5.4	-2.3	293	0.8	0.7	-0.3	257	7.8	7.6	1.8	233	10.7	8.6	6.4	221	3.0	2.0	2.3
6	124	2.3	-1.9	1.3	92	2.3	-2.3	0.1	54	6.1	-4.9	-3.6	360	0.6	0.0	-0.6	265	8.4	8.4	0.7	236	8.8	7.3	5.0	202	1.8	0.7	1.7
7	148	2.5	-1.3	2.1	105	2.0	-1.9	0.5	47	6.5	-4.8	-4.4	30	1.6	-0.8	-1.4	268	7.0	7.0	0.3	248	9.7	9.0	3.7	228	1.3	1.0	0.9
8	170	2.3	-0.4	2.3	87	2.2	-2.2	-0.1	50	6.7	-5.1	-4.3	51	1.3	-1.0	-0.8	263	4.8	4.8	0.6	247	8.3	7.7	3.2	151	3.1	-1.5	2.7
9	150	3.2	-1.6	2.8	79	1.5	-1.5	-0.3	47	6.5	-4.8	-4.4	30	1.4	-0.7	-1.2	255	4.6	4.4	1.2	249	8.5	7.9	3.1	108	1.3	-1.2	0.4
10	145	3.7	-2.1	3.0	107	1.7	-1.6	0.5	50	6.4	-4.9	-4.1	14	2.1	-0.5	-2.0	263	5.5	5.5	0.7	241	7.4	6.5	3.6	107	1.7	-1.6	0.5
11	165	3.8	-1.0	3.7	123	2.0	-1.7	1.1	58	6.5	-5.5	-3.4	38	2.4	-1.5	-1.9	249	1.9	1.8	0.7	220	5.2	3.4	4.0	104	3.3	-3.2	0.8
12	172	1.4	-0.2	1.4	105	2.0	-1.9	0.5	58	6.5	-5.5	-3.4	49	3.0	-2.3	-2.0	228	1.5	1.1	1.0	215	3.9	2.2	3.2	159	3.0	-1.1	2.8
13	185	2.5	0.2	2.5	101	1.5	-1.5	0.3	47	6.4	-4.7	-4.4	49	2.3	-1.7	-1.5	258	3.3	3.2	0.7	219	8.0	5.1	6.2	124	1.1	-0.9	0.6
14	139	2.3	-1.5	1.7	94	1.3	-1.3	0.1	51	6.9	-5.4	-4.3	56	1.4	-1.2	-0.8	245	4.0	3.6	1.7	237	8.2	6.8	4.5	142	2.3	-1.4	1.8
15	137	3.5	-2.4	2.6	126	0.9	-0.7	0.5	53	5.9	-4.7	-3.5	51	1.4	-1.1	-0.9	265	6.5	6.5	0.6	232	10.0	7.8	6.2	274	1.4	1.4	-0.1
16	142	2.8	-1.7	2.2	78	1.4	-1.4	-0.3	59	5.4	-4.6	-2.8	225	0.6	0.4	0.4	261	6.5	6.4	1.0	238	9.7	8.2	5.1	122	1.5	-1.3	0.8
17	136	3.0	-2.1	2.2	45	0.8	-0.6	-0.6	50	6.0	-4.6	-3.8	360	1.2	0.0	-1.2	249	6.9	6.4	2.5	236	8.5	7.0	4.8	142	1.6	-1.0	1.3
18	131	3.2	-2.4	2.1	90	0.2	-0.2	0.0	50	7.7	-5.9	-4.9	5	1.2	-0.1	-1.2	246	8.5	7.8	3.4	234	13.7	11.1	8.0	185	3.3	0.3	3.3
19	167	2.3	-0.5	2.2	96	0.9	-0.9	0.1	45	5.2	-3.7	-3.7	38	1.1	-0.7	-0.9	254	7.7	7.4	2.1	223	10.8	7.4	7.9	135	3.0	-2.1	2.1
20	166	2.9	-0.7	2.8	94	1.3	-1.3	0.1	53	7.5	-6.0	-4.5	45	1.4	-1.0	-1.0	254	7.4	7.1	2.0	230	12.1	9.2	7.8	186	1.9	0.2	1.9
21	169	2.1	-0.4	2.1	108	2.0	-1.9	0.6	53	7.4	-5.9	-4.5	360	0.7	0.0	-0.7	252	8.0	7.6	2.5	225	11.9	8.4	8.4	279	0.6	0.6	-0.1
22	123	2.4	-2.0	1.3	81	1.3	-1.3	-0.2	59	7.1	-6.1	-3.6	346	1.2	0.3	-1.2	260	5.8	5.7	1.0	236	9.9	8.2	5.6	74	1.8	-1.7	-0.5
23	124	2.5	-2.1	1.4	35	1.2	-0.7	-1.0	50	6.5	-5.0	-4.2	293	1.3	1.2	-0.5	247	7.2	6.6	2.8	241	11.1	9.7	5.3	87	1.9	-1.9	-0.1
24	180	2.6	0.0	2.6	14	0.8	-0.2	-0.8	49	6.8	-5.1	-4.5	303	1.7	1.4	-0.9	251	8.8	8.3	2.8	236	10.0	8.3	5.5	88	3.1	-3.1	-0.1
25	156	2.4	-1.0	2.2	22	2.4	-0.9	-2.2	44	6.5	-4.5	-4.7	256	1.2	1.2	0.3	261	6.4	6.3	1.0	230	9.7	7.4	6.2	143	2.1	-1.3	1.7
26	161	3.1	-1.0	2.9	49	1.8	-1.4	-1.2	52	7.3	-5.8	-4.5	313	1.9	1.4	-1.3	260	7.7	7.6	1.3	246	8.9	8.1	3.6	120	3.2	-2.8	1.6
27	164	3.2	-0.9	3.1	18	1.3	-0.4	-1.2	43	6.5	-4.4	-4.8	347	2.3	0.5	-2.2	274	6.7	6.7	-0.5	241	8.1	7.1	3.9	94	5.5	-5.5	0.4
28	171	3.3	-0.5	3.3	344	0.7	0.2	-0.7	36	7.1	-4.2	-5.7	335	2.1	0.9	-1.9	267	5.6	5.6	0.3	228	7.6	5.7	5.1	100	5.1	-5.0	0.9
29	183	1.9	0.1	1.9	337	1.5	0.6	-1.4	39	6.0	-3.8	-4.7	354	3.1	0.3	-3.1	283	5.0	4.9	-1.1	240	8.5	7.3	4.3	98	5.2	-5.2	0.7
30	161	2.1	-0.7	2.0	356	1.6	0.1	-1.6	44	6.3	-4.4	-4.5	343	2.4	0.7	-2.3	264	3.9	3.9	0.4	231	6.3	4.9	4.0	90	6.7	-6.7	0.0

Daily Normals of Upper Air Winds (1971-2000)

CHENNAI

MAY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	115	2.9	-2.6	1.2	349	2.0	0.4	-2.0	40	6.2	-4.0	-4.7	7	3.3	-0.4	-3.3	252	3.5	3.3	1.1	236	3.4	2.8	1.9	101	6.5	-6.4	1.3			
2	112	2.4	-2.2	0.9	342	1.6	0.5	-1.5	39	5.6	-3.5	-4.4	13	2.8	-0.6	-2.7	266	2.9	2.9	0.2	219	5.1	3.2	4.0	101	7.3	-7.2	1.4			
3	135	2.3	-1.6	1.6	20	1.5	-0.5	-1.4	34	5.9	-3.3	-4.9	40	1.6	-1.0	-1.2	266	3.1	3.1	0.2	234	4.6	3.7	2.7	124	7.7	-6.4	4.3			
4	118	2.4	-2.1	1.1	9	1.3	-0.2	-1.3	47	5.4	-3.9	-3.7	45	3.1	-2.2	-2.2	279	2.4	2.4	-0.4	204	3.4	1.4	3.1	90	6.4	-6.4	0.0			
5	113	3.6	-3.3	1.4	37	1.5	-0.9	-1.2	47	6.3	-4.6	-4.3	28	2.1	-1.0	-1.9	249	1.9	1.8	0.7	184	4.5	0.3	4.5	95	7.0	-7.0	0.6			
6	117	3.1	-2.8	1.4	17	1.0	-0.3	-1.0	46	5.4	-3.9	-3.8	11	1.6	-0.3	-1.6	260	1.1	1.1	0.2	230	3.4	2.6	2.2	90	7.8	-7.8	0.0			
7	123	4.0	-3.4	2.2	6	1.0	-0.1	-1.0	42	6.6	-4.4	-4.9	32	4.1	-2.2	-3.5	278	0.7	0.7	-0.1	190	3.6	0.6	3.5	90	8.9	-8.9	0.0			
8	155	2.1	-0.9	1.9	315	2.1	1.5	-1.5	26	6.6	-2.9	-5.9	320	1.6	1.0	-1.2	270	1.2	1.2	0.0	203	3.0	1.2	2.8	89	7.2	-7.2	-0.1			
9	158	1.1	-0.4	1.0	315	1.6	1.1	-1.1	41	4.9	-3.2	-3.7	25	2.6	-1.1	-2.4	274	1.3	1.3	-0.1	180	3.2	0.0	3.2	86	9.6	-9.6	-0.6			
10	176	2.9	-0.2	2.9	288	0.9	0.9	-0.3	38	3.9	-2.4	-3.1	49	1.1	-0.8	-0.7	254	1.5	1.4	0.4	177	3.7	-0.2	3.7	98	8.6	-8.5	1.2			
11	128	1.6	-1.3	1.0	342	1.9	0.6	-1.8	41	5.6	-3.7	-4.2	354	2.0	0.2	-2.0	216	1.4	0.8	1.1	185	4.5	0.4	4.5	103	8.0	-7.8	1.8			
12	139	0.9	-0.6	0.7	288	2.2	2.1	-0.7	30	4.2	-2.1	-3.6	15	2.0	-0.5	-1.9	198	3.2	1.0	3.0	187	5.9	0.7	5.9	96	10.0	-9.9	1.1			
13	162	2.0	-0.6	1.9	286	1.9	1.8	-0.5	24	4.2	-1.7	-3.8	32	1.9	-1.0	-1.6	182	3.6	0.1	3.6	174	4.5	-0.5	4.5	100	12.1	-11.9	2.2			
14	104	0.8	-0.8	0.2	295	1.7	1.5	-0.7	34	3.7	-2.1	-3.1	64	2.5	-2.3	-1.1	169	2.1	-0.4	2.1	134	5.0	-3.6	3.5	97	11.0	-10.9	1.3			
15	191	1.6	0.3	1.6	292	2.4	2.2	-0.9	26	3.0	-1.3	-2.7	37	1.0	-0.6	-0.8	127	0.5	-0.4	0.3	124	4.6	-3.8	2.6	99	14.8	-14.6	2.3			
16	205	1.7	0.7	1.5	302	2.5	2.1	-1.3	32	3.4	-1.8	-2.9	20	2.0	-0.7	-1.9	102	1.9	-1.9	0.4	109	6.1	-5.8	2.0	99	13.8	-13.6	2.1			
17	228	3.9	2.9	2.6	293	3.4	3.1	-1.3	16	4.4	-1.2	-4.2	353	2.5	0.3	-2.5	81	0.6	-0.6	-0.1	123	4.3	-3.6	2.3	100	12.1	-11.9	2.0			
18	205	4.7	2.0	4.3	288	3.9	3.7	-1.2	357	4.2	0.2	-4.2	335	2.3	1.0	-2.1	—	—	—	—	110	5.2	-4.9	1.8	98	16.2	-16.1	2.2			
19	260	2.2	2.2	0.4	286	2.6	2.5	-0.7	9	3.6	-0.6	-3.6	9	2.4	-0.4	-2.4	94	1.3	-1.3	0.1	127	6.2	-5.0	3.7	93	13.1	-13.1	0.7			
20	225	2.0	1.4	1.4	303	3.7	3.1	-2.0	7	4.0	-0.5	-4.0	6	3.0	-0.3	-3.0	160	1.5	-0.5	1.4	125	7.2	-5.9	4.1	103	14.1	-13.7	3.2			
21	243	0.9	0.8	0.4	288	3.5	3.3	-1.1	353	2.4	0.3	-2.4	4	2.9	-0.2	-2.9	142	1.1	-0.7	0.9	115	5.1	-4.6	2.1	95	13.0	-13.0	1.1			
22	247	1.5	1.4	0.6	288	4.1	3.9	-1.3	8	2.8	-0.4	-2.8	341	2.4	0.8	-2.3	346	0.8	0.2	-0.8	131	5.3	-4.0	3.5	105	12.9	-12.5	3.3			
23	237	3.3	2.8	1.8	293	3.6	3.3	-1.4	356	4.0	0.3	-4.0	343	3.4	1.0	-3.2	41	0.9	-0.6	-0.7	126	6.1	-4.9	3.6	93	13.4	-13.4	0.8			
24	208	3.0	1.4	2.6	297	3.9	3.5	-1.8	355	3.7	0.3	-3.7	352	2.9	0.4	-2.9	284	0.4	0.4	-0.1	132	4.3	-3.2	2.9	93	15.4	-15.4	0.7			
25	229	2.3	1.7	1.5	288	3.6	3.4	-1.1	354	3.0	0.3	-3.0	351	2.4	0.4	-2.4	198	0.9	0.3	0.9	116	5.5	-4.9	2.4	89	16.9	-16.9	-0.2			
26	223	2.3	1.6	1.7	290	3.2	3.0	-1.1	21	2.8	-1.0	-2.6	5	2.3	-0.2	-2.3	167	1.7	-0.4	1.7	107	6.6	-6.3	1.9	100	18.0	-17.7	3.0			
27	199	4.2	1.4	4.0	289	3.9	3.7	-1.3	17	2.1	-0.6	-2.0	49	1.8	-1.4	-1.2	96	2.0	-2.0	0.2	96	7.2	-7.2	0.7	97	15.5	-15.4	1.8			
28	232	3.3	2.6	2.0	274	4.5	4.5	-0.3	2	2.4	-0.1	-2.4	4	2.9	-0.2	-2.9	144	1.9	-1.1	1.5	113	7.5	-6.9	2.9	91	15.8	-15.8	0.4			
29	220	2.6	1.7	2.0	281	3.6	3.5	-0.7	356	3.1	0.2	-3.1	353	3.2	0.4	-3.2	133	1.6	-1.2	1.1	107	6.3	-6.0	1.8	95	18.9	-18.8	1.7			
30	219	2.1	1.3	1.6	274	4.5	4.5	-0.3	339	2.6	0.9	-2.4	16	1.8	-0.5	-1.7	76	1.6	-1.6	-0.4	114	7.1	-6.5	2.9	96	18.9	-18.8	1.9			
31	201	2.2	0.8	2.1	287	4.8	4.6	-1.4	324	2.9	1.7	-2.3	7	2.4	-0.3	-2.4	75	2.3	-2.2	-0.6	105	8.9	-8.6	2.3	98	19.0	-18.8	2.5			

Daily Normals of Upper Air Winds (1971-2000)

CHENNAI

JUNE

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	216	2.6	1.5	2.1	282	4.5	4.4	-0.9	313	3.7	2.7	-2.5	332	1.9	0.9	-1.7	130	1.6	-1.2	1.0	106	9.8	-9.4	2.7	90	20.8	-20.8	-0.1			
2	182	3.2	0.1	3.2	276	4.6	4.6	-0.5	315	4.0	2.8	-2.8	329	2.3	1.2	-2.0	10	2.2	-0.4	-2.2	98	7.5	-7.4	1.1	96	20.9	-20.8	2.2			
3	251	2.8	2.6	0.9	276	5.6	5.6	-0.6	299	3.5	3.1	-1.7	340	1.2	0.4	-1.1	135	1.1	-0.8	0.8	99	9.1	-9.0	1.5	95	23.7	-23.6	1.9			
4	233	2.5	2.0	1.5	282	5.8	5.7	-1.2	302	3.2	2.7	-1.7	275	2.1	2.1	-0.2	138	1.5	-1.0	1.1	94	12.2	-12.2	0.8	90	23.7	-23.7	0.2			
5	196	4.0	1.1	3.8	265	5.3	5.3	0.5	290	4.4	4.1	-1.5	276	1.8	1.8	-0.2	99	2.5	-2.5	0.4	94	10.6	-10.6	0.8	89	22.8	-22.8	-0.5			
6	214	2.9	1.6	2.4	272	5.8	5.8	-0.2	267	5.8	5.8	0.3	286	1.8	1.7	-0.5	86	2.7	-2.7	-0.2	84	11.9	-11.8	-1.2	86	24.1	-24.0	-1.8			
7	235	3.3	2.7	1.9	262	5.9	5.8	0.8	279	4.9	4.8	-0.8	303	2.4	2.0	-1.3	67	3.3	-3.0	-1.3	84	11.5	-11.4	-1.1	85	25.1	-25.0	-2.0			
8	217	1.5	0.9	1.2	272	6.1	6.1	-0.2	279	5.1	5.0	-0.8	308	1.1	0.9	-0.7	83	4.3	-4.3	-0.5	90	14.8	-14.8	-0.1	87	25.0	-25.0	-1.1			
9	249	3.0	2.8	1.1	272	6.3	6.3	-0.2	287	6.1	5.8	-1.8	306	2.6	2.1	-1.5	74	4.5	-4.3	-1.2	85	13.4	-13.3	-1.2	91	24.9	-24.9	0.5			
10	257	2.6	2.5	0.6	278	6.9	6.8	-0.9	283	6.6	6.4	-1.5	300	4.0	3.5	-2.0	82	3.6	-3.6	-0.5	90	12.5	-12.5	0.0	86	25.4	-25.3	-1.8			
11	266	4.0	4.0	0.3	279	7.2	7.1	-1.1	287	8.3	7.9	-2.4	287	3.8	3.6	-1.1	90	4.9	-4.9	0.0	91	16.1	-16.1	0.2	90	24.9	-24.9	0.0			
12	267	4.4	4.4	0.2	275	7.1	7.1	-0.6	287	7.0	6.7	-2.1	295	3.8	3.5	-1.6	77	2.8	-2.7	-0.6	87	14.9	-14.9	-0.8	89	26.0	-26.0	-0.4			
13	272	6.0	6.0	-0.2	282	7.0	6.8	-1.5	289	7.8	7.4	-2.5	287	5.3	5.1	-1.6	97	2.4	-2.4	0.3	83	13.6	-13.5	-1.7	90	28.2	-28.2	-0.1			
14	247	6.1	5.6	2.4	276	7.2	7.2	-0.8	282	8.2	8.0	-1.7	286	5.5	5.3	-1.5	92	3.2	-3.2	0.1	84	15.5	-15.4	-1.7	90	28.2	-28.2	-0.1			
15	249	6.6	6.2	2.4	269	8.4	8.4	0.2	274	9.3	9.3	-0.6	276	6.2	6.2	-0.7	60	2.4	-2.1	-1.2	83	14.0	-13.9	-1.7	90	27.8	-27.8	0.1			
16	241	5.4	4.7	2.6	271	9.0	9.0	-0.1	281	11.4	11.2	-2.2	266	6.6	6.6	0.5	98	1.5	-1.5	0.2	82	15.9	-15.7	-2.2	86	29.4	-29.3	-2.0			
17	240	7.0	6.1	3.5	265	9.7	9.7	0.9	277	12.1	12.0	-1.5	268	7.5	7.5	0.3	93	4.5	-4.5	0.2	80	17.4	-17.1	-3.0	86	27.8	-27.7	-2.1			
18	238	7.0	6.0	3.7	268	9.1	9.1	0.3	277	11.9	11.8	-1.5	275	7.6	7.6	-0.6	79	3.1	-3.0	-0.6	86	19.1	-19.1	-1.2	84	28.0	-27.8	-3.1			
19	234	7.5	6.1	4.4	267	9.6	9.6	0.5	276	12.3	12.2	-1.3	274	6.5	6.5	-0.5	84	4.5	-4.5	-0.5	81	20.2	-20.0	-3.1	89	29.4	-29.4	-0.5			
20	230	6.5	5.0	4.2	269	7.9	7.9	0.1	284	11.3	11.0	-2.7	275	6.6	6.6	-0.6	89	4.4	-4.4	-0.1	84	21.8	-21.7	-2.4	93	29.5	-29.5	1.4			
21	253	5.9	5.6	1.7	275	8.3	8.3	-0.7	277	10.4	10.3	-1.3	275	7.9	7.9	-0.7	64	4.3	-3.9	-1.9	83	17.9	-17.8	-2.2	87	30.2	-30.2	-1.5			
22	243	5.1	4.6	2.3	264	8.0	8.0	0.8	282	11.5	11.2	-2.4	263	7.2	7.1	0.9	81	3.3	-3.3	-0.5	83	18.6	-18.4	-2.4	86	29.9	-29.8	-2.1			
23	240	5.4	4.7	2.7	268	8.1	8.1	0.3	278	11.4	11.3	-1.5	267	6.2	6.2	0.3	98	2.9	-2.9	0.4	85	19.3	-19.2	-1.8	83	30.5	-30.3	-3.5			
24	267	5.6	5.6	0.3	272	8.5	8.5	-0.3	276	12.0	11.9	-1.3	270	7.1	7.1	0.0	86	3.1	-3.1	-0.2	87	21.1	-21.1	-1.1	84	34.3	-34.1	-3.5			
25	251	5.6	5.3	1.8	265	8.4	8.4	0.7	278	11.5	11.4	-1.6	273	6.5	6.5	-0.3	87	4.4	-4.4	-0.2	80	19.4	-19.1	-3.2	90	31.6	-31.6	-0.1			
26	248	4.8	4.4	1.8	267	8.3	8.3	0.5	275	11.9	11.8	-1.1	268	7.0	7.0	0.3	104	4.6	-4.5	1.1	83	17.6	-17.5	-2.1	89	32.4	-32.4	-0.5			
27	257	5.3	5.2	1.2	271	8.8	8.8	-0.1	275	12.3	12.3	-1.1	263	6.4	6.3	0.8	95	6.3	-6.3	0.6	80	21.3	-21.0	-3.6	85	34.2	-34.1	-2.7			
28	252	5.2	5.0	1.6	269	8.8	8.8	0.1	279	11.6	11.4	-1.9	267	6.5	6.5	0.3	84	6.1	-6.1	-0.6	84	19.3	-19.2	-1.9	84	33.3	-33.1	-3.6			
29	237	7.0	5.9	3.8	267	8.3	8.3	0.4	279	10.7	10.6	-1.6	272	6.0	6.0	-0.2	79	4.9	-4.8	-0.9	85	18.6	-18.5	-1.5	86	29.5	-29.4	-2.1			
30	240	5.3	4.6	2.7	262	7.9	7.8	1.1	273	10.7	10.7	-0.6	277	6.2	6.1	-0.8	99	5.3	-5.2	0.8	88	21.9	-21.9	-0.8	86	34.3	-34.2	-2.1			

Daily Normals of Upper Air Winds (1971-2000)

CHENNAI

JULY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	242	6.4	5.6	3.0	265	8.8	8.8	0.7	277	10.6	10.5	-1.2	273	5.1	5.1	-0.3	84	4.4	-4.4	-0.5	84	20.9	-20.8	-2.2	89	35.3	-35.3	-0.9
2	259	4.9	4.8	0.9	272	7.6	7.6	-0.3	275	10.4	10.4	-1.0	260	6.5	6.4	1.1	79	4.7	-4.6	-0.9	81	21.0	-20.7	-3.4	87	33.1	-33.1	-1.8
3	277	5.9	5.9	-0.7	282	7.9	7.7	-1.6	279	9.5	9.4	-1.5	274	5.2	5.2	-0.4	93	5.9	-5.9	0.3	83	22.0	-21.8	-2.6	89	37.1	-37.1	-0.9
4	279	4.4	4.3	-0.7	273	7.1	7.1	-0.4	281	8.7	8.5	-1.7	272	5.3	5.3	-0.2	103	5.9	-5.8	1.3	84	21.5	-21.4	-2.3	91	33.4	-33.4	0.5
5	233	2.6	2.1	1.6	273	6.8	6.8	-0.4	274	9.0	9.0	-0.7	270	6.2	6.2	0.0	88	6.5	-6.5	-0.2	80	18.0	-17.7	-3.0	88	32.8	-32.8	-1.2
6	231	4.1	3.2	2.6	265	7.5	7.5	0.6	277	10.0	9.9	-1.3	269	6.0	6.0	0.1	89	5.0	-5.0	-0.1	82	19.7	-19.5	-2.8	85	31.2	-31.1	-2.9
7	261	4.4	4.3	0.7	265	7.6	7.6	0.6	272	9.9	9.9	-0.4	261	6.1	6.0	0.9	77	5.5	-5.4	-1.2	78	20.8	-20.3	-4.3	84	36.1	-35.9	-3.7
8	255	4.7	4.5	1.2	262	8.2	8.1	1.2	275	10.0	10.0	-0.9	266	6.1	6.1	0.4	95	5.2	-5.2	0.5	84	20.7	-20.6	-2.3	84	33.6	-33.4	-3.4
9	241	5.6	4.9	2.7	272	8.1	8.1	-0.3	277	9.8	9.7	-1.2	263	6.0	6.0	0.7	91	6.2	-6.2	0.1	82	19.6	-19.4	-2.6	87	30.7	-30.6	-1.8
10	240	6.7	5.8	3.3	272	7.7	7.7	-0.3	277	9.5	9.4	-1.1	276	6.2	6.2	-0.6	92	5.1	-5.1	0.2	82	21.2	-21.0	-3.1	85	34.3	-34.2	-2.8
11	236	6.5	5.4	3.6	272	7.2	7.2	-0.3	277	10.4	10.3	-1.3	270	5.9	5.9	0.0	101	4.1	-4.0	0.8	83	20.9	-20.8	-2.4	85	33.9	-33.8	-2.7
12	234	7.2	5.8	4.2	269	7.4	7.4	0.1	277	10.4	10.3	-1.3	262	6.3	6.2	0.9	96	4.9	-4.9	0.5	82	18.8	-18.6	-2.5	93	27.8	-27.8	1.5
13	256	6.0	5.8	1.4	271	8.2	8.2	-0.2	274	10.4	10.4	-0.7	260	6.1	6.0	1.1	96	5.8	-5.8	0.6	82	19.1	-18.9	-2.5	84	26.9	-26.8	-2.7
14	241	5.0	4.4	2.4	273	8.1	8.1	-0.4	275	10.6	10.6	-1.0	279	6.2	6.1	-1.0	89	4.8	-4.8	-0.1	87	21.5	-21.5	-1.2	83	30.4	-30.1	-3.9
15	252	6.3	6.0	2.0	273	9.2	9.2	-0.5	280	10.9	10.7	-1.8	273	5.6	5.6	-0.3	86	5.7	-5.7	-0.4	83	19.0	-18.8	-2.4	87	31.5	-31.4	-1.8
16	245	4.5	4.1	1.9	274	8.6	8.6	-0.6	277	10.3	10.2	-1.3	276	5.3	5.3	-0.6	98	4.1	-4.1	0.6	81	16.5	-16.3	-2.6	88	33.5	-33.5	-1.4
17	232	4.4	3.5	2.7	275	8.3	8.3	-0.7	280	10.4	10.2	-1.8	261	5.7	5.6	0.9	83	4.9	-4.9	-0.6	82	18.0	-17.8	-2.4	82	36.7	-36.4	-4.9
18	251	4.9	4.6	1.6	272	8.5	8.5	-0.3	282	10.5	10.3	-2.2	258	4.4	4.3	0.9	95	6.9	-6.9	0.6	89	20.4	-20.4	-0.5	82	32.8	-32.4	-4.8
19	233	5.4	4.3	3.2	271	7.5	7.5	-0.1	283	9.9	9.6	-2.3	269	3.9	3.9	0.1	100	7.7	-7.6	1.3	82	22.9	-22.7	-3.3	87	34.7	-34.6	-2.0
20	221	4.3	2.8	3.2	272	7.7	7.7	-0.3	284	9.8	9.5	-2.3	268	3.1	3.1	0.1	98	6.1	-6.0	0.8	88	20.4	-20.4	-0.8	91	35.1	-35.1	0.4
21	265	3.5	3.5	0.3	281	7.5	7.4	-1.4	280	9.4	9.2	-1.7	276	4.5	4.5	-0.5	80	8.3	-8.2	-1.4	84	20.9	-20.8	-2.1	85	32.9	-32.8	-2.6
22	264	4.8	4.8	0.5	274	7.7	7.7	-0.5	277	9.3	9.2	-1.1	271	4.8	4.8	-0.1	77	5.1	-5.0	-1.2	84	20.8	-20.7	-2.2	87	36.1	-36.0	-2.0
23	282	4.2	4.1	-0.9	272	6.3	6.3	-0.2	274	8.6	8.6	-0.6	273	5.7	5.7	-0.3	96	6.7	-6.7	0.7	88	22.2	-22.2	-0.8	85	36.4	-36.3	-3.0
24	254	4.5	4.3	1.2	271	6.8	6.8	-0.1	274	9.0	9.0	-0.6	251	5.0	4.7	1.6	84	7.3	-7.3	-0.8	82	22.1	-21.9	-3.0	87	37.7	-37.7	-1.8
25	255	7.0	6.8	1.8	278	7.6	7.5	-1.0	275	9.6	9.6	-0.9	265	3.6	3.6	0.3	92	7.3	-7.3	0.2	88	22.4	-22.4	-0.8	87	33.3	-33.3	-1.5
26	258	6.0	5.9	1.3	278	8.4	8.3	-1.2	279	10.5	10.4	-1.7	269	6.5	6.5	0.1	99	5.7	-5.6	0.9	86	22.4	-22.3	-1.5	88	31.2	-31.2	-1.1
27	249	6.4	6.0	2.3	279	8.7	8.6	-1.3	279	10.1	10.0	-1.6	275	5.8	5.8	-0.5	97	5.4	-5.4	0.7	88	22.6	-22.6	-0.9	84	33.8	-33.6	-3.4
28	254	7.1	6.8	1.9	280	8.2	8.1	-1.4	285	10.6	10.3	-2.7	264	6.2	6.2	0.6	90	6.2	-6.2	0.0	85	21.8	-21.7	-1.8	83	34.4	-34.1	-4.3
29	263	7.0	6.9	0.9	274	8.1	8.1	-0.6	284	10.8	10.5	-2.7	275	7.0	7.0	-0.6	82	5.5	-5.4	-0.8	85	22.3	-22.2	-1.9	87	31.7	-31.7	-1.7
30	264	6.3	6.3	0.7	281	8.8	8.6	-1.7	279	10.0	9.9	-1.6	278	5.9	5.8	-0.8	76	6.1	-5.9	-1.5	81	18.9	-18.7	-2.9	89	31.0	-31.0	-0.6
31	255	5.2	5.0	1.3	280	8.3	8.2	-1.4	283	11.0	10.7	-2.5	274	6.5	6.5	-0.5	81	4.0	-4.0	-0.6	84	20.7	-20.6	-2.0	86	32.3	-32.2	-2.4

Daily Normals of Upper Air Winds (1971-2000)

CHENNAI

AUGUST

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	275	5.5	5.5	-0.5	275	9.0	9.0	-0.8	281	11.1	10.9	-2.2	278	7.3	7.2	-1.0	85	3.2	-3.2	-0.3	84	18.7	-18.6	-1.8	85	31.0	-30.9	-2.6			
2	262	5.2	5.2	0.7	277	7.9	7.8	-1.0	280	10.2	10.1	-1.7	270	5.6	5.6	0.0	93	5.3	-5.3	0.3	85	21.0	-20.9	-2.0	80	31.9	-31.4	-5.8			
3	260	5.0	4.9	0.9	273	7.7	7.7	-0.4	278	9.0	8.9	-1.2	265	4.7	4.7	0.4	111	6.7	-6.3	2.4	82	22.8	-22.6	-3.2	85	31.8	-31.7	-2.7			
4	268	2.8	2.8	0.1	279	6.9	6.8	-1.1	273	9.3	9.3	-0.5	266	5.1	5.1	0.4	95	7.5	-7.5	0.6	84	22.9	-22.8	-2.2	85	29.1	-29.0	-2.4			
5	238	3.2	2.7	1.7	277	7.0	6.9	-0.9	280	9.1	9.0	-1.6	272	4.6	4.6	-0.2	90	6.5	-6.5	0.0	83	23.3	-23.1	-2.7	84	32.4	-32.2	-3.6			
6	235	3.2	2.6	1.8	270	7.5	7.5	0.0	280	9.4	9.2	-1.7	266	4.7	4.7	0.3	95	6.5	-6.5	0.6	87	21.5	-21.5	-1.2	91	31.2	-31.2	0.4			
7	245	4.2	3.8	1.8	274	8.2	8.2	-0.6	285	10.6	10.2	-2.8	266	7.1	7.1	0.5	95	5.6	-5.6	0.5	80	19.6	-19.3	-3.5	84	31.7	-31.5	-3.4			
8	245	6.0	5.4	2.5	277	9.3	9.2	-1.2	284	11.9	11.5	-2.9	278	6.6	6.5	-0.9	100	5.7	-5.6	1.0	83	20.7	-20.5	-2.6	87	28.6	-28.5	-1.7			
9	258	6.0	5.9	1.3	276	8.1	8.1	-0.9	285	11.5	11.1	-3.0	272	7.3	7.3	-0.3	106	5.0	-4.8	1.4	84	20.2	-20.1	-2.1	85	32.4	-32.3	-2.7			
10	250	4.5	4.2	1.5	277	7.8	7.7	-0.9	280	12.5	12.3	-2.2	273	6.0	6.0	-0.3	82	4.9	-4.9	-0.7	83	18.5	-18.3	-2.4	87	28.6	-28.6	-1.5			
11	240	4.3	3.7	2.1	279	8.2	8.1	-1.3	283	10.5	10.2	-2.3	276	5.8	5.8	-0.6	90	5.8	-5.8	0.0	86	19.5	-19.4	-1.4	87	35.0	-34.9	-2.0			
12	262	5.5	5.4	0.8	276	8.6	8.6	-0.9	279	10.6	10.5	-1.7	270	6.2	6.2	0.0	86	5.8	-5.8	-0.4	83	21.0	-20.9	-2.5	87	32.2	-32.2	-1.7			
13	276	4.6	4.6	-0.5	278	8.4	8.3	-1.2	288	10.4	9.9	-3.2	285	6.0	5.8	-1.6	99	5.6	-5.5	0.9	86	20.8	-20.8	-1.3	88	31.1	-31.1	-1.0			
14	265	4.6	4.6	0.4	277	8.8	8.7	-1.0	286	10.0	9.6	-2.7	282	5.5	5.4	-1.1	90	5.7	-5.7	0.0	81	19.7	-19.5	-3.0	83	30.5	-30.3	-3.7			
15	265	5.2	5.2	0.5	276	9.6	9.5	-1.0	285	10.2	9.9	-2.6	271	4.4	4.4	-0.1	98	6.8	-6.7	1.0	85	21.5	-21.4	-1.8	86	31.4	-31.3	-2.1			
16	274	4.8	4.8	-0.3	276	7.9	7.9	-0.8	281	10.3	10.1	-2.0	267	5.9	5.9	0.3	100	6.5	-6.4	1.1	88	19.6	-19.6	-0.7	84	29.4	-29.2	-3.2			
17	255	3.0	2.9	0.8	276	7.7	7.7	-0.8	278	9.2	9.1	-1.3	270	5.4	5.4	0.0	104	6.1	-5.9	1.5	88	20.7	-20.7	-0.7	88	29.6	-29.6	-1.1			
18	256	4.0	3.9	1.0	276	7.0	7.0	-0.7	281	10.1	9.9	-1.9	271	5.1	5.1	-0.1	110	7.5	-7.0	2.6	87	21.6	-21.6	-1.0	84	31.9	-31.7	-3.6			
19	217	3.5	2.1	2.8	276	7.3	7.3	-0.8	284	9.3	9.0	-2.2	282	4.4	4.3	-0.9	91	7.9	-7.9	0.1	86	21.0	-20.9	-1.5	85	27.1	-27.0	-2.2			
20	262	4.3	4.3	0.6	277	8.3	8.2	-1.0	278	9.8	9.7	-1.4	280	4.7	4.6	-0.8	95	6.4	-6.4	0.6	89	18.4	-18.4	-0.4	84	31.1	-30.9	-3.3			
21	260	3.4	3.3	0.6	280	7.0	6.9	-1.2	287	8.8	8.4	-2.5	277	5.0	5.0	-0.6	108	5.1	-4.8	1.6	86	18.9	-18.8	-1.4	87	31.4	-31.4	-1.6			
22	275	3.3	3.3	-0.3	280	6.8	6.7	-1.2	280	9.0	8.9	-1.6	261	3.8	3.8	0.6	102	7.1	-6.9	1.5	80	18.5	-18.2	-3.1	87	31.2	-31.2	-1.6			
23	245	3.8	3.4	1.6	280	6.7	6.6	-1.2	282	9.2	9.0	-1.9	248	4.0	3.7	1.5	98	8.4	-8.3	1.2	91	21.7	-21.7	0.3	83	30.2	-30.0	-3.5			
24	240	4.8	4.2	2.4	280	6.2	6.1	-1.1	280	8.5	8.4	-1.5	259	4.1	4.0	0.8	84	6.9	-6.9	-0.7	84	20.2	-20.1	-2.2	84	28.2	-28.1	-2.8			
25	249	5.0	4.7	1.8	283	7.5	7.3	-1.7	276	8.2	8.2	-0.8	283	4.3	4.2	-1.0	94	6.0	-6.0	0.4	86	18.7	-18.7	-1.3	86	33.4	-33.3	-2.5			
26	255	5.4	5.2	1.4	283	7.5	7.3	-1.7	281	10.1	9.9	-1.9	284	4.6	4.5	-1.1	96	4.9	-4.9	0.5	86	19.0	-18.9	-1.4	90	26.7	-26.7	0.0			
27	278	6.4	6.3	-0.9	282	8.1	7.9	-1.7	282	9.9	9.7	-2.0	265	6.4	6.4	0.6	115	5.7	-5.2	2.4	85	18.8	-18.7	-1.6	88	29.4	-29.4	-0.9			
28	255	5.8	5.6	1.5	282	6.8	6.7	-1.4	283	9.4	9.2	-2.1	268	3.6	3.6	0.1	94	6.5	-6.5	0.5	87	17.8	-17.8	-1.0	86	31.0	-30.9	-2.1			
29	252	6.3	6.0	1.9	281	7.7	7.6	-1.5	279	10.0	9.9	-1.6	262	4.9	4.9	0.7	104	4.9	-4.8	1.2	86	19.9	-19.9	-1.3	89	30.4	-30.4	-0.5			
30	257	4.3	4.2	1.0	277	7.0	7.0	-0.8	275	9.2	9.2	-0.8	275	4.2	4.2	-0.4	92	7.2	-7.2	0.2	87	20.3	-20.3	-1.0	89	28.2	-28.2	-0.3			
31	129	1.4	-1.1	0.9	280	6.6	6.5	-1.2	281	9.1	8.9	-1.7	274	3.2	3.2	-0.2	89	9.0	-9.0	-0.2	89	23.7	-23.7	-0.6	91	30.5	-30.5	0.3			

Daily Normals of Upper Air Winds (1971-2000)

CHENNAI

SEPTEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	253	4.7	4.5	1.4	267	6.1	6.1	0.3	276	8.1	8.1	-0.8	255	2.8	2.7	0.7	97	9.3	-9.2	1.1	85	22.2	-22.1	-2.1	86	30.7	-30.6	-2.4			
2	245	5.2	4.7	2.2	267	6.6	6.6	0.3	271	9.0	9.0	-0.1	259	3.1	3.0	0.6	99	7.5	-7.4	1.2	85	20.2	-20.1	-1.7	86	26.7	-26.6	-1.8			
3	252	4.5	4.3	1.4	269	6.6	6.6	0.1	276	8.2	8.2	-0.9	278	3.4	3.4	-0.5	94	6.4	-6.4	0.4	85	20.0	-19.9	-1.8	87	24.5	-24.5	-1.4			
4	257	4.5	4.4	1.0	275	6.4	6.4	-0.6	280	7.4	7.3	-1.3	260	2.7	2.7	0.5	96	7.4	-7.4	0.8	84	21.2	-21.1	-2.2	86	23.8	-23.8	-1.5			
5	238	4.0	3.4	2.1	273	5.9	5.9	-0.3	275	7.3	7.3	-0.7	274	2.8	2.8	-0.2	101	7.0	-6.9	1.4	89	19.7	-19.7	-0.2	88	23.4	-23.4	-0.9			
6	245	3.3	3.0	1.4	278	5.1	5.1	-0.7	284	6.7	6.5	-1.6	276	2.7	2.7	-0.3	92	7.5	-7.5	0.2	87	18.9	-18.9	-1.0	85	26.1	-26.0	-2.2			
7	251	4.3	4.1	1.4	291	5.7	5.3	-2.0	285	7.0	6.8	-1.8	291	3.0	2.8	-1.1	96	6.7	-6.7	0.7	86	17.3	-17.3	-1.3	88	24.3	-24.3	-1.0			
8	236	3.4	2.8	1.9	285	5.7	5.5	-1.5	283	6.9	6.7	-1.5	304	2.7	2.2	-1.5	95	6.1	-6.1	0.5	85	17.4	-17.3	-1.5	90	25.9	-25.9	0.2			
9	259	2.5	2.5	0.5	285	5.6	5.4	-1.4	292	6.8	6.3	-2.6	293	2.6	2.4	-1.0	94	6.4	-6.4	0.5	88	16.6	-16.6	-0.7	89	27.9	-27.9	-0.5			
10	278	1.4	1.4	-0.2	290	4.8	4.5	-1.6	291	6.0	5.6	-2.1	282	1.4	1.4	-0.3	107	4.9	-4.7	1.4	91	16.5	-16.5	0.2	87	24.0	-24.0	-1.4			
11	248	2.2	2.0	0.8	279	5.0	4.9	-0.8	284	5.4	5.2	-1.3	274	1.5	1.5	-0.1	97	5.8	-5.8	0.7	91	15.8	-15.8	0.2	92	22.9	-22.9	0.7			
12	218	2.4	1.5	1.9	273	4.0	4.0	-0.2	272	4.6	4.6	-0.2	228	1.3	1.0	0.9	102	7.5	-7.3	1.5	86	15.6	-15.6	-1.0	90	23.7	-23.7	0.0			
13	260	4.7	4.6	0.8	283	4.4	4.3	-1.0	275	4.3	4.3	-0.4	36	0.9	-0.5	-0.7	94	6.2	-6.2	0.4	91	15.2	-15.2	0.2	89	23.7	-23.7	-0.3			
14	253	3.4	3.2	1.0	295	3.3	3.0	-1.4	285	4.2	4.1	-1.1	11	1.0	-0.2	-1.0	93	6.7	-6.7	0.4	90	13.5	-13.5	0.0	87	21.0	-21.0	-1.2			
15	217	3.8	2.3	3.0	298	2.7	2.4	-1.3	297	4.2	3.8	-1.9	360	1.1	0.0	-1.1	89	6.5	-6.5	-0.1	94	15.1	-15.1	1.0	92	22.2	-22.2	0.7			
16	221	2.8	1.8	2.1	293	2.5	2.3	-1.0	305	3.8	3.1	-2.2	97	1.6	-1.6	0.2	93	8.0	-8.0	0.4	94	16.0	-16.0	1.1	90	23.4	-23.4	0.0			
17	256	2.1	2.0	0.5	290	3.2	3.0	-1.1	291	2.8	2.6	-1.0	171	0.6	-0.1	0.6	100	6.8	-6.7	1.2	89	16.9	-16.9	-0.2	92	24.0	-24.0	1.0			
18	277	3.2	3.2	-0.4	299	3.8	3.3	-1.8	302	3.8	3.2	-2.0	18	0.6	-0.2	-0.6	89	5.7	-5.7	-0.1	91	14.4	-14.4	0.3	90	22.9	-22.9	0.0			
19	290	2.7	2.5	-0.9	292	3.5	3.2	-1.3	299	3.8	3.3	-1.8	337	0.8	0.3	-0.7	87	5.1	-5.1	-0.3	92	14.2	-14.2	0.6	95	19.5	-19.4	1.8			
20	355	1.2	0.1	-1.2	304	3.4	2.8	-1.9	305	4.0	3.3	-2.3	352	0.7	0.1	-0.7	98	6.3	-6.2	0.9	95	14.8	-14.7	1.4	92	20.1	-20.1	0.8			
21	303	2.4	2.0	-1.3	293	4.0	3.7	-1.6	297	4.2	3.7	-1.9	326	1.4	0.8	-1.2	89	6.3	-6.3	-0.1	84	12.4	-12.3	-1.3	93	22.9	-22.9	1.4			
22	321	1.3	0.8	-1.0	311	3.2	2.4	-2.1	300	3.4	2.9	-1.7	262	0.7	0.7	0.1	104	4.9	-4.8	1.2	92	14.2	-14.2	0.5	88	22.1	-22.1	-0.6			
23	30	0.8	-0.4	-0.7	292	3.5	3.3	-1.3	298	3.0	2.6	-1.4	270	0.2	0.2	0.0	108	6.6	-6.3	2.0	95	14.6	-14.6	1.2	91	19.6	-19.6	0.3			
24	278	0.7	0.7	-0.1	296	3.9	3.5	-1.7	298	3.0	2.6	-1.4	169	1.5	-0.3	1.5	106	7.8	-7.5	2.2	89	14.5	-14.5	-0.3	85	22.1	-22.0	-1.8			
25	97	0.8	-0.8	0.1	304	2.3	1.9	-1.3	273	2.1	2.1	-0.1	103	0.9	-0.9	0.2	95	6.3	-6.3	0.5	93	13.3	-13.3	0.8	85	20.1	-20.0	-1.7			
26	236	0.7	0.6	0.4	298	2.7	2.4	-1.3	293	3.6	3.3	-1.4	143	1.0	-0.6	0.8	100	6.6	-6.5	1.1	87	13.1	-13.1	-0.6	89	22.5	-22.5	-0.5			
27	344	1.5	0.4	-1.4	294	3.7	3.4	-1.5	288	3.2	3.0	-1.0	76	0.4	-0.4	-0.1	104	4.9	-4.8	1.2	89	13.7	-13.7	-0.3	93	19.9	-19.9	1.1			
28	198	0.6	0.2	0.6	308	3.4	2.7	-2.1	317	3.5	2.4	-2.6	297	0.2	0.2	-0.1	102	6.1	-6.0	1.3	93	14.1	-14.1	0.7	92	18.2	-18.2	0.5			
29	90	1.4	-1.4	0.0	300	2.0	1.7	-1.0	309	1.9	1.5	-1.2	81	0.6	-0.6	-0.1	87	5.5	-5.5	-0.3	90	11.9	-11.9	0.0	92	16.8	-16.8	0.7			
30	45	0.1	-0.1	-0.1	292	2.2	2.0	-0.8	306	2.4	1.9	-1.4	6	1.0	-0.1	-1.0	93	5.6	-5.6	0.3	97	13.3	-13.2	1.6	91	16.1	-16.1	0.4			

Daily Normals of Upper Air Winds (1971-2000)

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CHENNAI

OCTOBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	56	2.2	-1.8	-1.2	308	2.8	2.2	-1.7	326	2.2	1.2	-1.8	292	0.5	0.5	-0.2	102	5.2	-5.1	1.1	95	12.5	-12.5	1.1	92	14.0	-14.0	0.4			
2	326	0.4	0.2	-0.3	299	2.3	2.0	-1.1	305	2.9	2.4	-1.7	270	0.7	0.7	0.0	111	3.6	-3.4	1.3	94	12.5	-12.5	0.8	90	13.8	-13.8	0.0			
3	355	1.1	0.1	-1.1	305	3.8	3.1	-2.2	309	4.0	3.1	-2.5	275	2.2	2.2	-0.2	111	4.4	-4.1	1.6	85	13.8	-13.8	-1.1	93	17.0	-17.0	0.9			
4	293	3.3	3.0	-1.3	308	4.2	3.3	-2.6	317	3.4	2.3	-2.5	320	0.8	0.5	-0.6	82	5.0	-5.0	-0.7	94	9.5	-9.5	0.7	91	16.4	-16.4	0.2			
5	324	1.9	1.1	-1.5	306	3.7	3.0	-2.2	305	3.3	2.7	-1.9	219	0.6	0.4	0.5	101	4.7	-4.6	0.9	92	10.8	-10.8	0.4	93	12.8	-12.8	0.6			
6	356	2.6	0.2	-2.6	324	2.6	1.5	-2.1	298	1.9	1.7	-0.9	159	0.9	-0.3	0.8	107	3.7	-3.5	1.1	97	10.9	-10.8	1.4	92	14.3	-14.3	0.6			
7	352	3.0	0.4	-3.0	345	2.7	0.7	-2.6	351	1.3	0.2	-1.3	135	0.4	-0.3	0.3	106	6.0	-5.8	1.7	92	11.7	-11.7	0.4	92	12.4	-12.4	0.4			
8	352	2.1	0.3	-2.1	327	2.0	1.1	-1.7	317	1.9	1.3	-1.4	171	0.6	-0.1	0.6	100	6.8	-6.7	1.2	94	10.3	-10.3	0.8	86	15.2	-15.2	-1.0			
9	225	0.8	0.6	0.6	326	1.1	0.6	-0.9	294	1.0	0.9	-0.4	108	1.3	-1.2	0.4	102	5.7	-5.6	1.2	90	11.8	-11.8	-0.1	90	14.3	-14.3	-0.1			
10	207	0.9	0.4	0.8	326	1.8	1.0	-1.5	324	1.9	1.1	-1.5	87	1.7	-1.7	-0.1	105	5.0	-4.8	1.3	95	10.1	-10.1	0.9	94	14.9	-14.9	1.1			
11	111	1.4	-1.3	0.5	360	1.1	0.0	-1.1	342	1.6	0.5	-1.5	80	1.1	-1.1	-0.2	95	4.9	-4.9	0.4	92	8.2	-8.2	0.3	89	12.5	-12.5	-0.3			
12	45	1.1	-0.8	-0.8	356	2.7	0.2	-2.7	348	2.4	0.5	-2.3	77	2.7	-2.6	-0.6	101	4.4	-4.3	0.8	105	8.6	-8.3	2.2	104	10.4	-10.1	2.5			
13	357	2.1	0.1	-2.1	343	3.4	1.0	-3.2	349	2.6	0.5	-2.6	66	1.7	-1.6	-0.7	108	2.6	-2.5	0.8	110	7.5	-7.0	2.6	107	11.6	-11.1	3.4			
14	9	4.0	-0.6	-4.0	357	4.0	0.2	-4.0	351	3.2	0.5	-3.2	39	1.4	-0.9	-1.1	106	4.4	-4.2	1.2	107	8.7	-8.3	2.5	98	13.0	-12.9	1.9			
15	17	3.8	-1.1	-3.6	357	3.8	0.2	-3.8	339	3.3	1.2	-3.1	354	1.0	0.1	-1.0	110	3.0	-2.8	1.0	112	8.1	-7.5	3.1	98	12.7	-12.6	1.7			
16	5	3.6	-0.3	-3.6	9	3.7	-0.6	-3.7	5	3.2	-0.3	-3.2	77	1.7	-1.7	-0.4	113	4.9	-4.5	1.9	107	9.7	-9.3	2.8	91	14.8	-14.8	0.3			
17	18	0.9	-0.3	-0.9	360	3.9	0.0	-3.9	10	2.8	-0.5	-2.8	96	1.8	-1.8	0.2	117	3.5	-3.1	1.6	107	7.7	-7.4	2.2	101	14.7	-14.4	2.8			
18	36	2.4	-1.4	-1.9	358	3.7	0.1	-3.7	360	2.5	0.0	-2.5	85	1.2	-1.2	-0.1	108	4.8	-4.6	1.5	98	8.6	-8.5	1.2	98	11.0	-10.9	1.6			
19	38	1.8	-1.1	-1.4	34	2.7	-1.5	-2.2	56	0.4	-0.3	-0.2	113	2.6	-2.4	1.0	115	5.2	-4.7	2.2	104	9.6	-9.3	2.3	91	10.3	-10.3	0.1			
20	65	3.3	-3.0	-1.4	46	3.7	-2.7	-2.6	48	1.5	-1.1	-1.0	115	3.3	-3.0	1.4	101	3.3	-3.2	0.6	114	6.4	-5.9	2.6	104	11.9	-11.5	2.9			
21	68	2.4	-2.2	-0.9	29	3.1	-1.5	-2.7	42	1.3	-0.9	-1.0	99	3.0	-3.0	0.5	109	3.4	-3.2	1.1	112	6.5	-6.0	2.4	90	10.6	-10.6	0.0			
22	64	3.2	-2.9	-1.4	37	3.1	-1.9	-2.5	42	2.5	-1.7	-1.9	103	2.3	-2.2	0.5	95	3.5	-3.5	0.3	113	7.6	-7.0	2.9	100	10.0	-9.9	1.7			
23	71	3.1	-2.9	-1.0	36	3.2	-1.9	-2.6	50	1.7	-1.3	-1.1	94	1.6	-1.6	0.1	107	3.1	-3.0	0.9	112	7.0	-6.5	2.6	102	6.9	-6.8	1.4			
24	43	3.7	-2.5	-2.7	43	4.0	-2.7	-2.9	50	2.6	-2.0	-1.7	86	3.0	-3.0	-0.2	91	4.6	-4.6	0.1	124	6.5	-5.4	3.7	108	8.9	-8.5	2.8			
25	45	3.3	-2.3	-2.3	53	4.4	-3.5	-2.6	56	3.0	-2.5	-1.7	78	4.2	-4.1	-0.9	98	4.9	-4.8	0.7	111	6.3	-5.9	2.3	106	7.5	-7.2	2.0			
26	24	4.6	-1.9	-4.2	36	5.1	-3.0	-4.1	34	3.6	-2.0	-3.0	81	2.5	-2.5	-0.4	111	4.2	-3.9	1.5	120	5.9	-5.1	3.0	92	7.7	-7.7	0.3			
27	44	3.9	-2.7	-2.8	48	4.2	-3.1	-2.8	55	2.8	-2.3	-1.6	111	2.6	-2.4	0.9	109	4.3	-4.1	1.4	120	6.0	-5.2	3.0	103	9.8	-9.6	2.2			
28	44	4.0	-2.8	-2.9	42	4.7	-3.1	-3.5	51	3.2	-2.5	-2.0	100	2.9	-2.9	0.5	106	3.7	-3.6	1.0	120	3.9	-3.4	2.0	96	8.4	-8.4	0.9			
29	17	5.6	-1.6	-5.4	34	5.0	-2.8	-4.1	53	2.6	-2.1	-1.6	93	2.0	-2.0	0.1	114	2.7	-2.5	1.1	130	5.2	-4.0	3.4	108	8.1	-7.7	2.5			
30	12	6.2	-1.3	-6.1	23	4.9	-1.9	-4.5	36	3.1	-1.8	-2.5	92	2.7	-2.7	0.1	119	2.3	-2.0	1.1	128	5.3	-4.2	3.3	114	8.5	-7.8	3.5			
31	36	2.7	-1.6	-2.2	23	3.4	-1.3	-3.1	32	1.3	-0.7	-1.1	108	0.9	-0.9	0.3	130	2.6	-2.0	1.7	130	5.9	-4.5	3.8	97	6.8	-6.8	0.8			

Daily Normals of Upper Air Winds (1971-2000)

CHENNAI

NOVEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	27	3.4	-1.5	-3.0	32	4.4	-2.3	-3.7	43	2.5	-1.7	-1.8	66	3.7	-3.4	-1.5	108	3.6	-3.4	1.1	129	5.0	-3.9	3.2	104	8.1	-7.9	2.0			
2	68	3.1	-2.9	-1.2	55	4.4	-3.6	-2.5	86	3.0	-3.0	-0.2	95	3.3	-3.3	0.3	120	3.4	-2.9	1.7	133	7.1	-5.2	4.8	107	5.2	-5.0	1.5			
3	28	6.8	-3.2	-6.0	39	4.0	-2.5	-3.1	64	3.7	-3.3	-1.6	88	3.6	-3.6	-0.1	127	4.5	-3.6	2.7	137	8.8	-6.0	6.5	99	7.8	-7.7	1.2			
4	44	5.9	-4.1	-4.3	43	5.1	-3.5	-3.7	68	4.8	-4.4	-1.8	81	3.0	-3.0	-0.5	128	3.1	-2.4	1.9	141	6.2	-3.9	4.8	107	6.5	-6.2	1.9			
5	32	8.0	-4.2	-6.8	46	5.7	-4.1	-4.0	59	3.5	-3.0	-1.8	102	4.0	-3.9	0.8	142	2.9	-1.8	2.3	152	5.3	-2.5	4.7	104	4.9	-4.7	1.2			
6	39	6.4	-4.0	-5.0	38	5.3	-3.3	-4.2	71	3.4	-3.2	-1.1	87	3.4	-3.4	-0.2	105	3.4	-3.3	0.9	142	6.7	-4.1	5.3	124	6.6	-5.5	3.7			
7	43	5.9	-4.0	-4.3	46	5.5	-4.0	-3.8	61	2.9	-2.5	-1.4	99	3.7	-3.7	0.6	109	4.0	-3.8	1.3	131	6.0	-4.5	3.9	122	6.0	-5.1	3.2			
8	61	5.7	-5.0	-2.8	48	5.4	-4.0	-3.6	60	3.0	-2.6	-1.5	77	4.4	-4.3	-1.0	108	3.3	-3.1	1.0	120	6.4	-5.6	3.2	87	5.9	-5.9	-0.3			
9	56	4.5	-3.7	-2.5	43	4.2	-2.9	-3.1	54	2.4	-1.9	-1.4	86	4.5	-4.5	-0.3	106	3.2	-3.1	0.9	134	6.1	-4.4	4.2	111	5.3	-5.0	1.9			
10	57	5.3	-4.4	-2.9	44	4.3	-3.0	-3.1	56	3.4	-2.8	-1.9	72	4.0	-3.8	-1.2	94	3.0	-3.0	0.2	131	5.2	-3.9	3.4	97	5.7	-5.7	0.7			
11	47	6.2	-4.5	-4.2	37	6.6	-4.0	-5.3	60	4.6	-4.0	-2.3	57	4.6	-3.9	-2.5	98	3.7	-3.7	0.5	129	7.0	-5.5	4.4	112	7.3	-6.8	2.7			
12	43	6.3	-4.3	-4.6	57	6.2	-5.2	-3.4	66	3.9	-3.6	-1.6	73	3.9	-3.7	-1.1	116	3.4	-3.1	1.5	130	6.0	-4.6	3.8	99	9.2	-9.1	1.5			
13	40	8.8	-5.7	-6.7	41	5.7	-3.7	-4.3	46	3.5	-2.5	-2.4	94	3.2	-3.2	0.2	138	2.5	-1.7	1.9	152	6.4	-3.0	5.6	111	6.6	-6.1	2.4			
14	39	6.5	-4.1	-5.0	44	4.7	-3.3	-3.4	62	3.0	-2.6	-1.4	111	2.5	-2.3	0.9	146	2.3	-1.3	1.9	137	6.3	-4.3	4.6	99	5.6	-5.5	0.9			
15	53	3.6	-2.9	-2.2	49	4.5	-3.4	-3.0	90	2.1	-2.1	0.0	94	3.0	-3.0	0.2	112	2.2	-2.0	0.8	135	5.9	-4.2	4.2	99	7.4	-7.3	1.1			
16	59	5.5	-4.7	-2.8	38	5.4	-3.3	-4.3	59	1.7	-1.5	-0.9	71	2.4	-2.3	-0.8	118	1.5	-1.3	0.7	146	6.2	-3.5	5.1	108	5.4	-5.1	1.7			
17	54	4.9	-4.0	-2.9	43	4.7	-3.2	-3.4	80	1.7	-1.7	-0.3	88	2.4	-2.4	-0.1	135	3.0	-2.1	2.1	147	7.0	-3.8	5.9	126	6.6	-5.3	3.9			
18	39	5.5	-3.5	-4.3	37	5.3	-3.2	-4.2	45	2.4	-1.7	-1.7	63	2.5	-2.2	-1.1	152	2.1	-1.0	1.9	161	7.9	-2.6	7.5	140	5.3	-3.4	4.1			
19	42	4.6	-3.1	-3.4	29	4.7	-2.3	-4.1	43	1.6	-1.1	-1.2	59	2.9	-2.5	-1.5	193	1.8	0.4	1.8	177	7.9	-0.4	7.9	136	3.2	-2.2	2.3			
20	41	6.5	-4.2	-4.9	40	5.4	-3.5	-4.1	51	2.8	-2.2	-1.8	88	2.8	-2.8	-0.1	172	3.6	-0.5	3.6	165	8.6	-2.3	8.3	120	5.6	-4.9	2.8			
21	40	7.6	-4.9	-5.8	39	5.8	-3.6	-4.5	54	2.4	-1.9	-1.4	85	3.2	-3.2	-0.3	186	4.0	0.4	4.0	164	11.4	-3.2	10.9	116	3.9	-3.5	1.7			
22	57	6.9	-5.8	-3.8	44	6.0	-4.2	-4.3	72	3.9	-3.7	-1.2	99	2.0	-2.0	0.3	209	2.9	1.4	2.5	176	9.0	-0.6	9.0	150	4.0	-2.0	3.5			
23	43	7.9	-5.4	-5.7	44	6.1	-4.2	-4.4	67	4.3	-4.0	-1.7	81	2.5	-2.5	-0.4	192	1.4	0.3	1.4	176	9.1	-0.6	9.1	129	4.1	-3.2	2.6			
24	27	7.4	-3.3	-6.6	33	7.4	-4.0	-6.2	61	4.7	-4.1	-2.3	67	4.0	-3.7	-1.6	217	2.1	1.3	1.7	185	7.1	0.6	7.1	160	6.1	-2.1	5.7			
25	28	5.9	-2.8	-5.2	43	5.0	-3.4	-3.7	63	2.2	-2.0	-1.0	63	2.5	-2.2	-1.1	214	1.1	0.6	0.9	197	5.5	1.6	5.3	121	4.4	-3.8	2.3			
26	22	6.4	-2.4	-5.9	34	4.2	-2.4	-3.5	72	1.9	-1.8	-0.6	74	3.6	-3.5	-1.0	117	1.1	-1.0	0.5	179	5.2	-0.1	5.2	111	3.9	-3.6	1.4			
27	30	6.9	-3.5	-6.0	39	5.6	-3.5	-4.4	56	3.0	-2.5	-1.7	54	5.1	-4.1	-3.0	211	0.6	0.3	0.5	184	6.5	0.4	6.5	93	4.4	-4.4	0.2			
28	29	8.2	-4.0	-7.2	42	6.4	-4.3	-4.8	56	3.4	-2.8	-1.9	61	5.3	-4.6	-2.6	52	1.1	-0.9	-0.7	162	7.9	-2.4	7.5	106	4.0	-3.8	1.1			
29	44	7.1	-5.0	-5.1	46	5.7	-4.1	-4.0	55	3.7	-3.0	-2.1	65	4.3	-3.9	-1.8	214	1.1	0.6	0.9	185	8.8	0.7	8.8	99	4.5	-4.4	0.7			
30	35	6.5	-3.7	-5.3	40	6.5	-4.2	-5.0	63	4.0	-3.6	-1.8	59	5.2	-4.5	-2.7	256	0.8	0.8	0.2	188	6.9	0.9	6.8	108	4.3	-4.1	1.3			

Daily Normals of Upper Air Winds (1971-2000)

96

CHENNAI

DECEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	35	6.2	-3.6	-5.1	58	6.1	-5.2	-3.2	69	3.6	-3.4	-1.3	80	4.2	-4.1	-0.7	125	1.9	-1.6	1.1	169	7.3	-1.4	7.2	180	3.2	0.0	3.2			
2	29	6.4	-3.1	-5.6	53	5.9	-4.7	-3.5	80	4.2	-4.1	-0.7	79	4.9	-4.8	-0.9	145	1.9	-1.1	1.6	182	9.4	0.3	9.4	135	1.1	-0.8	0.8			
3	35	7.0	-4.0	-5.8	52	7.1	-5.6	-4.3	72	6.4	-6.1	-2.0	50	4.5	-3.4	-2.9	207	0.2	0.1	0.2	186	6.9	0.7	6.9	128	2.9	-2.3	1.8			
4	53	6.7	-5.4	-4.0	53	7.6	-6.0	-4.6	64	5.7	-5.1	-2.5	73	5.0	-4.8	-1.5	194	3.4	0.8	3.3	196	7.7	2.1	7.4	202	1.6	0.6	1.5			
5	40	5.6	-3.6	-4.3	45	7.2	-5.1	-5.1	59	5.1	-4.4	-2.6	44	4.2	-2.9	-3.0	220	3.8	2.4	2.9	186	9.8	1.1	9.7	107	4.7	-4.5	1.4			
6	30	7.5	-3.7	-6.5	40	5.7	-3.7	-4.4	61	3.9	-3.4	-1.9	45	3.7	-2.6	-2.6	299	1.3	1.1	-0.6	194	6.6	1.6	6.4	121	2.6	-2.2	1.3			
7	38	7.0	-4.3	-5.5	38	6.0	-3.7	-4.7	62	4.5	-4.0	-2.1	54	3.4	-2.8	-2.0	275	2.2	2.2	-0.2	188	7.5	1.1	7.4	154	2.5	-1.1	2.3			
8	37	8.1	-4.9	-6.5	36	5.7	-3.3	-4.6	71	3.6	-3.4	-1.2	59	2.7	-2.3	-1.4	238	3.8	3.2	2.0	203	7.7	3.0	7.1	186	3.1	0.3	3.1			
9	26	7.8	-3.4	-7.0	43	5.2	-3.6	-3.8	69	3.6	-3.4	-1.3	82	2.2	-2.2	-0.3	228	3.9	2.9	2.6	208	6.7	3.2	5.9	160	4.1	-1.4	3.9			
10	42	7.3	-4.9	-5.4	45	5.2	-3.7	-3.7	72	3.9	-3.7	-1.2	72	2.3	-2.2	-0.7	242	3.8	3.4	1.8	209	7.9	3.9	6.9	168	3.8	-0.8	3.7			
11	32	7.1	-3.8	-6.0	55	5.9	-4.8	-3.4	74	5.3	-5.1	-1.5	77	3.2	-3.1	-0.7	210	2.0	1.0	1.7	198	6.5	2.0	6.2	130	5.0	-3.8	3.2			
12	42	8.1	-5.4	-6.1	56	6.5	-5.4	-3.7	79	5.3	-5.2	-1.0	81	3.2	-3.2	-0.5	216	3.2	1.9	2.6	209	8.8	4.3	7.7	140	5.1	-3.3	3.9			
13	43	6.7	-4.5	-4.9	54	6.0	-4.9	-3.5	79	4.9	-4.8	-0.9	83	3.2	-3.2	-0.4	239	4.2	3.6	2.2	203	8.6	3.4	7.9	207	2.8	1.3	2.5			
14	46	7.0	-5.0	-4.9	58	5.8	-4.9	-3.1	63	4.5	-4.0	-2.0	84	1.8	-1.8	-0.2	237	3.8	3.2	2.1	211	7.8	4.0	6.7	194	4.9	1.2	4.7			
15	41	7.3	-4.8	-5.5	54	7.2	-5.8	-4.2	77	3.7	-3.6	-0.8	72	1.9	-1.8	-0.6	242	5.0	4.4	2.3	229	9.1	6.9	6.0	174	1.8	-0.2	1.8			
16	40	7.1	-4.6	-5.4	52	6.3	-5.0	-3.9	80	3.9	-3.8	-0.7	61	3.1	-2.7	-1.5	257	6.1	5.9	1.4	207	8.8	4.0	7.8	176	3.2	-0.2	3.2			
17	35	7.5	-4.3	-6.2	46	6.4	-4.6	-4.5	68	4.0	-3.7	-1.5	73	2.7	-2.6	-0.8	250	5.4	5.1	1.9	213	9.8	5.4	8.2	193	2.2	0.5	2.1			
18	31	6.6	-3.4	-5.7	54	5.3	-4.3	-3.1	70	3.7	-3.5	-1.3	57	3.3	-2.8	-1.8	248	5.0	4.6	1.9	218	10.7	6.6	8.4	284	0.8	0.8	-0.2			
19	33	6.4	-3.5	-5.4	46	6.5	-4.7	-4.5	68	4.3	-4.0	-1.6	56	3.4	-2.8	-1.9	245	4.7	4.2	2.0	213	9.5	5.2	7.9	250	3.7	3.5	1.3			
20	43	6.3	-4.3	-4.6	62	5.9	-5.2	-2.8	73	3.9	-3.7	-1.1	59	2.1	-1.8	-1.1	249	5.0	4.7	1.8	208	9.9	4.7	8.7	242	2.1	1.9	1.0			
21	49	7.0	-5.3	-4.6	47	6.7	-4.9	-4.5	60	4.8	-4.2	-2.4	70	3.3	-3.1	-1.1	243	5.3	4.7	2.4	221	11.2	7.3	8.5	209	2.3	1.1	2.0			
22	46	6.6	-4.7	-4.6	59	6.5	-5.6	-3.3	64	3.4	-3.1	-1.5	62	2.4	-2.1	-1.1	247	6.0	5.5	2.3	232	10.6	8.3	6.6	187	4.2	0.5	4.2			
23	40	6.1	-3.9	-4.7	57	5.9	-4.9	-3.2	72	4.2	-4.0	-1.3	103	1.8	-1.8	0.4	245	9.0	8.2	3.8	225	12.5	8.9	8.8	219	5.4	3.4	4.2			
24	36	5.4	-3.2	-4.4	52	5.3	-4.2	-3.3	51	3.6	-2.8	-2.3	355	1.1	0.1	-1.1	260	7.5	7.4	1.3	229	10.9	8.3	7.1	229	6.0	4.5	3.9			
25	36	6.4	-3.8	-5.2	53	4.9	-3.9	-2.9	82	2.9	-2.9	-0.4	25	2.1	-0.9	-1.9	242	6.2	5.5	2.9	225	12.6	8.9	8.9	217	5.5	3.3	4.4			
26	39	6.5	-4.1	-5.0	55	5.0	-4.1	-2.9	56	2.2	-1.8	-1.2	63	1.8	-1.6	-0.8	259	6.5	6.4	1.2	222	11.7	7.8	8.7	211	4.5	2.3	3.9			
27	47	6.4	-4.7	-4.4	57	5.3	-4.4	-2.9	70	2.9	-2.7	-1.0	95	2.1	-2.1	0.2	241	5.2	4.6	2.5	223	11.0	7.5	8.1	202	1.1	0.4	1.0			
28	46	6.6	-4.8	-4.6	50	5.5	-4.2	-3.5	90	1.5	-1.5	0.0	129	1.4	-1.1	0.9	230	5.1	3.9	3.3	217	8.8	5.3	7.0	135	0.7	-0.5	0.5			
29	53	5.8	-4.6	-3.5	54	4.1	-3.3	-2.4	82	1.5	-1.5	-0.2	52	1.8	-1.4	-1.1	270	6.0	6.0	0.0	230	9.1	7.0	5.8	133	1.6	-1.2	1.1			
30	44	5.6	-3.9	-4.0	52	4.2	-3.3	-2.6	54	1.9	-1.5	-1.1	22	1.8	-0.7	-1.7	274	5.8	5.8	-0.4	221	12.7	8.3	9.6	250	3.3	3.1	1.1			
31	38	5.1	-3.1	-4.0	53	4.1	-3.3	-2.5	79	2.5	-2.5	-0.5	108	1.3	-1.2	0.4	250	5.2	4.9	1.8	219	9.6	6.0	7.5	195	2.0	0.5	1.9			

Daily Normals of Upper Air Winds (1971-2000)

GOA

JANUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	112	2.2	-2.0	0.8	81	4.9	-4.8	-0.8	54	1.7	-1.4	-1.0	302	4.0	3.4	-2.1	266	12.8	12.8	0.8	263	16.1	16.0	2.1	257	1.7	1.7	0.4
2	52	2.4	-1.9	-1.5	70	4.7	-4.4	-1.6	86	2.7	-2.7	-0.2	272	5.1	5.1	-0.2	260	13.7	13.5	2.4	247	15.2	14.0	5.9	223	2.5	1.7	1.8
3	68	2.4	-2.2	-0.9	87	5.5	-5.5	-0.3	68	2.2	-2.0	-0.8	307	3.0	2.4	-1.8	253	11.5	11.0	3.4	254	16.1	15.5	4.5	238	5.1	4.3	2.7
4	78	2.4	-2.3	-0.5	78	4.8	-4.7	-1.0	69	3.0	-2.8	-1.1	288	4.4	4.2	-1.4	258	13.6	13.3	2.9	249	15.1	14.1	5.4	268	7.2	7.2	0.3
5	56	2.2	-1.8	-1.2	83	4.6	-4.6	-0.6	54	1.7	-1.4	-1.0	292	3.5	3.2	-1.3	269	11.4	11.4	0.2	255	15.5	15.0	3.9	279	7.4	7.3	-1.1
6	86	1.3	-1.3	-0.1	77	4.3	-4.2	-1.0	69	1.4	-1.3	-0.5	267	5.8	5.8	0.3	266	14.3	14.3	1.0	262	18.4	18.2	2.5	265	6.0	6.0	0.5
7	57	1.7	-1.4	-0.9	83	3.1	-3.1	-0.4	18	0.9	-0.3	-0.9	281	5.9	5.8	-1.1	266	14.6	14.6	0.9	268	15.8	15.8	0.6	254	7.2	6.9	2.0
8	112	0.5	-0.5	0.2	71	3.4	-3.2	-1.1	354	1.8	0.2	-1.8	290	7.3	6.9	-2.5	263	17.1	17.0	2.2	253	16.5	15.8	4.9	267	8.8	8.8	0.4
9	94	1.5	-1.5	0.1	80	2.8	-2.8	-0.5	24	1.0	-0.4	-0.9	270	3.7	3.7	0.0	263	13.9	13.8	1.7	267	15.9	15.9	0.8	269	5.4	5.4	0.1
10	69	1.4	-1.3	-0.5	90	2.8	-2.8	0.0	70	1.2	-1.1	-0.4	277	7.0	7.0	-0.8	266	15.2	15.2	1.0	276	13.9	13.8	-1.4	266	4.4	4.4	0.3
11	293	1.3	1.2	-0.5	107	2.1	-2.0	0.6	225	0.4	0.3	0.3	286	9.4	9.0	-2.6	268	21.2	21.2	0.9	249	20.8	19.4	7.4	223	5.6	3.8	4.1
12	329	1.2	0.6	-1.0	92	2.7	-2.7	0.1	344	1.5	0.4	-1.4	299	6.3	5.5	-3.1	267	15.8	15.8	0.9	259	16.6	16.3	3.2	315	4.8	3.4	-3.4
13	21	1.4	-0.5	-1.3	98	3.4	-3.4	0.5	32	0.9	-0.5	-0.8	289	5.5	5.2	-1.8	272	17.2	17.2	-0.6	263	17.8	17.7	2.1	223	4.1	2.8	3.0
14	285	1.1	1.1	-0.3	99	2.5	-2.5	0.4	67	1.5	-1.4	-0.6	275	6.7	6.7	-0.6	265	15.7	15.6	1.3	253	15.2	14.5	4.5	247	5.6	5.1	2.2
15	321	1.3	0.8	-1.0	95	2.3	-2.3	0.2	135	0.3	-0.2	0.2	275	6.8	6.8	-0.6	267	16.5	16.5	1.0	242	19.2	17.0	9.0	296	7.7	6.9	-3.4
16	345	1.1	0.3	-1.1	94	3.9	-3.9	0.3	51	1.3	-1.0	-0.8	252	6.3	6.0	1.9	261	16.4	16.2	2.6	249	15.7	14.6	5.7	252	4.0	3.8	1.2
17	310	0.8	0.6	-0.5	92	3.3	-3.3	0.1	27	0.9	-0.4	-0.8	275	7.2	7.2	-0.6	270	16.0	16.0	-0.1	272	14.9	14.9	-0.5	231	5.8	4.5	3.7
18	20	1.5	-0.5	-1.4	90	3.9	-3.9	0.0	11	1.5	-0.3	-1.5	295	5.7	5.2	-2.4	269	14.2	14.2	0.3	256	15.2	14.7	3.8	284	3.0	2.9	-0.7
19	328	2.6	1.4	-2.2	103	2.8	-2.7	0.6	354	1.8	0.2	-1.8	289	5.8	5.5	-1.9	270	16.4	16.4	-0.1	253	18.0	17.2	5.2	284	6.6	6.4	-1.6
20	338	2.7	1.0	-2.5	93	2.2	-2.2	0.1	26	2.8	-1.2	-2.5	277	4.6	4.6	-0.6	264	17.1	17.0	1.9	257	17.9	17.4	4.0	258	6.0	5.9	1.3
21	334	2.5	1.1	-2.3	77	2.6	-2.5	-0.6	10	2.8	-0.5	-2.8	290	5.3	5.0	-1.8	264	15.9	15.8	1.7	255	17.4	16.8	4.6	228	6.4	4.7	4.3
22	310	0.8	0.6	-0.5	84	3.8	-3.8	-0.4	48	2.7	-2.0	-1.8	290	5.6	5.3	-1.9	268	15.5	15.5	0.6	251	17.3	16.4	5.6	262	5.7	5.6	0.8
23	360	1.8	0.0	-1.8	85	3.8	-3.8	-0.3	39	3.3	-2.1	-2.6	288	5.1	4.8	-1.6	271	15.6	15.6	-0.4	257	17.2	16.8	3.9	254	5.8	5.6	1.6
24	34	1.4	-0.8	-1.2	85	4.7	-4.7	-0.4	44	3.3	-2.3	-2.4	296	5.1	4.6	-2.2	284	14.8	14.4	-3.5	256	16.8	16.3	4.0	183	3.6	0.2	3.6
25	34	1.1	-0.6	-0.9	77	4.9	-4.8	-1.1	49	2.8	-2.1	-1.8	273	3.5	3.5	-0.2	277	12.3	12.2	-1.5	258	13.9	13.6	2.9	271	5.4	5.4	-0.1
26	63	0.7	-0.6	-0.3	74	4.3	-4.1	-1.2	61	3.5	-3.1	-1.7	276	5.0	5.0	-0.5	267	14.4	14.4	0.7	268	17.6	17.6	0.5	266	9.6	9.6	0.7
27	297	0.2	0.2	-0.1	88	5.3	-5.3	-0.2	46	3.9	-2.8	-2.7	288	6.1	5.8	-1.9	267	12.7	12.7	0.7	255	16.2	15.7	4.1	237	4.0	3.4	2.2
28	41	1.8	-1.2	-1.4	82	5.2	-5.2	-0.7	48	4.5	-3.3	-3.0	299	5.3	4.6	-2.6	279	14.0	13.8	-2.1	252	14.5	13.8	4.5	272	5.4	5.4	-0.2
29	329	1.2	0.6	-1.0	92	4.6	-4.6	0.2	62	3.8	-3.4	-1.8	322	4.2	2.6	-3.3	279	12.3	12.1	-2.0	267	14.5	14.5	0.8	284	5.0	4.9	-1.2
30	320	2.3	1.5	-1.8	76	2.9	-2.8	-0.7	50	3.9	-3.0	-2.5	310	5.3	4.1	-3.4	269	15.0	15.0	0.3	271	16.8	16.8	-0.3	263	1.7	1.7	0.2
31	312	2.5	1.9	-1.7	82	2.1	-2.1	-0.3	30	3.4	-1.7	-2.9	306	5.8	4.7	-3.4	288	15.8	15.0	-4.9	263	19.9	19.7	2.5	277	7.4	7.3	-0.9

Daily Normals of Upper Air Winds (1971-2000)

GOA

FEBRUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	297	3.0	2.7	-1.4	67	2.3	-2.1	-0.9	34	2.3	-1.3	-1.9	289	7.3	6.9	-2.4	278	15.4	15.2	-2.2	266	18.0	18.0	1.3	276	6.0	6.0	-0.6			
2	270	1.0	1.0	0.0	112	2.2	-2.0	0.8	35	2.4	-1.4	-2.0	288	5.5	5.2	-1.7	276	18.0	17.9	-1.9	277	16.8	16.7	-2.0	289	6.9	6.5	-2.2			
3	307	0.5	0.4	-0.3	95	2.1	-2.1	0.2	16	2.2	-0.6	-2.1	280	7.9	7.8	-1.4	275	16.8	16.7	-1.5	264	19.0	18.9	2.1	281	8.4	8.2	-1.6			
4	236	0.4	0.3	0.2	96	1.8	-1.8	0.2	63	1.6	-1.4	-0.7	283	8.3	8.1	-1.9	273	16.9	16.9	-0.9	268	19.3	19.3	0.7	280	14.2	14.0	-2.4			
5	311	2.1	1.6	-1.4	61	1.3	-1.1	-0.6	349	2.1	0.4	-2.1	287	7.2	6.9	-2.1	272	16.1	16.1	-0.6	263	17.3	17.2	2.0	262	5.7	5.6	0.8			
6	272	2.9	2.9	-0.1	90	1.9	-1.9	0.0	53	2.6	-2.1	-1.6	288	6.6	6.3	-2.0	273	16.5	16.5	-1.0	272	17.6	17.6	-0.5	283	5.0	4.9	-1.1			
7	292	1.6	1.5	-0.6	87	1.9	-1.9	-0.1	40	2.6	-1.7	-2.0	291	6.0	5.6	-2.1	268	16.7	16.7	0.5	273	18.3	18.3	-0.8	289	3.1	2.9	-1.0			
8	302	2.8	2.4	-1.5	77	1.3	-1.3	-0.3	17	1.0	-0.3	-1.0	297	6.6	5.9	-3.0	264	16.8	16.7	1.9	270	15.2	15.2	0.1	269	7.5	7.5	0.1			
9	325	2.8	1.6	-2.3	76	0.4	-0.4	-0.1	35	1.9	-1.1	-1.6	292	7.1	6.6	-2.7	274	16.7	16.7	-1.1	279	18.4	18.2	-2.8	267	6.7	6.7	0.4			
10	239	1.2	1.0	0.6	126	1.9	-1.5	1.1	34	2.2	-1.2	-1.8	323	5.9	3.5	-4.7	284	13.3	12.9	-3.1	271	15.9	15.9	-0.4	338	0.5	0.2	-0.5			
11	243	0.9	0.8	0.4	145	1.9	-1.1	1.6	62	1.7	-1.5	-0.8	303	5.3	4.4	-2.9	290	14.1	13.3	-4.8	268	15.4	15.4	0.6	238	5.5	4.7	2.9			
12	270	1.7	1.7	0.0	104	1.6	-1.6	0.4	57	2.0	-1.7	-1.1	293	4.9	4.5	-1.9	278	13.0	12.9	-1.7	261	14.9	14.7	2.3	257	6.4	6.2	1.4			
13	236	1.4	1.2	0.8	125	1.2	-1.0	0.7	45	0.8	-0.6	-0.6	260	6.3	6.2	1.1	267	17.5	17.5	0.8	258	18.7	18.3	3.8	267	8.3	8.3	0.5			
14	288	2.2	2.1	-0.7	157	1.3	-0.5	1.2	203	1.3	0.5	1.2	286	5.7	5.5	-1.6	258	15.8	15.5	3.2	247	18.3	16.8	7.3	267	6.2	6.2	0.3			
15	300	2.4	2.1	-1.2	90	0.4	-0.4	0.0	276	1.0	1.0	-0.1	276	7.7	7.7	-0.8	262	15.1	15.0	2.1	247	16.9	15.6	6.5	263	6.2	6.1	0.8			
16	275	3.5	3.5	-0.3	18	0.3	-0.1	-0.3	240	2.2	1.9	1.1	268	8.9	8.9	0.3	255	14.9	14.4	3.9	243	15.0	13.4	6.7	266	8.7	8.7	0.6			
17	298	4.3	3.8	-2.0	129	0.6	-0.5	0.4	228	1.2	0.9	0.8	277	9.0	8.9	-1.1	255	16.2	15.6	4.3	245	17.6	16.0	7.4	278	8.6	8.5	-1.2			
18	314	2.9	2.1	-2.0	117	0.2	-0.2	0.1	259	0.5	0.5	0.1	295	7.5	6.8	-3.2	261	14.3	14.1	2.3	260	16.3	16.0	2.9	267	5.5	5.5	0.3			
19	267	1.7	1.7	0.1	158	1.1	-0.4	1.0	281	1.0	1.0	-0.2	292	8.2	7.6	-3.1	264	15.1	15.0	1.7	260	15.8	15.6	2.7	264	7.0	7.0	0.7			
20	300	3.0	2.6	-1.5	95	1.2	-1.2	0.1	321	1.3	0.8	-1.0	285	6.7	6.5	-1.8	268	15.7	15.7	0.6	255	16.9	16.3	4.4	275	7.3	7.3	-0.7			
21	304	3.6	3.0	-2.0	70	1.2	-1.1	-0.4	8	2.1	-0.3	-2.1	287	6.4	6.1	-1.9	276	15.1	15.0	-1.6	270	17.9	17.9	-0.1	308	8.7	6.8	-5.4			
22	303	3.5	2.9	-1.9	159	0.9	-0.3	0.8	117	0.2	-0.2	0.1	302	7.5	6.3	-4.0	268	13.9	13.9	0.4	260	14.6	14.4	2.6	297	6.1	5.4	-2.8			
23	241	2.3	2.0	1.1	117	1.3	-1.2	0.6	62	2.7	-2.4	-1.3	295	5.3	4.8	-2.2	276	13.5	13.4	-1.4	276	16.1	16.0	-1.6	338	2.7	1.0	-2.5			
24	288	2.2	2.1	-0.7	82	1.5	-1.5	-0.2	61	3.7	-3.2	-1.8	281	4.8	4.7	-0.9	262	12.9	12.8	1.7	259	14.0	13.7	2.7	253	8.2	7.8	2.4			
25	307	2.5	2.0	-1.5	207	0.4	0.2	0.4	61	2.1	-1.8	-1.0	288	5.2	4.9	-1.6	262	16.7	16.5	2.4	272	18.6	18.6	-0.8	281	6.4	6.3	-1.2			
26	285	3.4	3.3	-0.9	360	1.6	0.0	-1.6	61	3.8	-3.3	-1.8	263	6.1	6.1	0.7	266	15.5	15.5	1.2	264	15.6	15.5	1.6	275	8.8	8.8	-0.8			
27	288	2.6	2.5	-0.8	14	0.4	-0.1	-0.4	63	3.9	-3.5	-1.8	288	5.4	5.1	-1.7	262	17.0	16.8	2.5	266	15.7	15.7	1.1	265	6.5	6.5	0.6			
28	305	3.7	3.0	-2.1	343	1.4	0.4	-1.3	97	2.5	-2.5	0.3	282	5.5	5.4	-1.1	270	16.0	16.0	0.0	272	17.6	17.6	-0.7	202	4.1	1.5	3.8			
29	38	3.7	-2.3	-2.9	31	4.1	-2.1	-3.5	102	6.2	-6.1	1.3	347	4.1	0.9	-4.0	275	10.0	10.0	-0.8	237	9.6	8.1	5.2	212	0.9	0.5	0.8			

Daily Normals of Upper Air Winds (1971-2000)

GOA

MARCH

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	248	3.1	2.9	1.2	333	0.9	0.4	-0.8	74	3.5	-3.4	-1.0	280	6.5	6.4	-1.1	262	14.3	14.2	1.9	248	13.8	12.8	5.1	255	5.0	4.8	1.3			
2	252	2.0	1.9	0.6	146	0.4	-0.2	0.3	94	2.7	-2.7	0.2	278	6.5	6.4	-0.9	270	15.5	15.5	0.1	263	14.3	14.2	1.8	246	7.2	6.6	2.9			
3	270	2.9	2.9	0.0	90	1.8	-1.8	0.0	85	4.9	-4.9	-0.4	293	3.9	3.6	-1.5	267	13.7	13.7	0.8	255	15.6	15.1	4.0	253	8.4	8.0	2.5			
4	264	1.9	1.9	0.2	99	1.2	-1.2	0.2	81	4.3	-4.2	-0.7	283	3.7	3.6	-0.8	272	11.9	11.9	-0.5	261	15.4	15.2	2.3	274	4.2	4.2	-0.3			
5	290	2.9	2.7	-1.0	360	0.8	0.0	-0.8	98	3.7	-3.7	0.5	278	2.9	2.9	-0.4	263	12.8	12.7	1.5	254	14.8	14.2	4.1	281	5.4	5.3	-1.0			
6	304	3.7	3.1	-2.1	284	0.8	0.8	-0.2	101	3.1	-3.0	0.6	276	3.6	3.6	-0.4	258	14.3	14.0	3.0	266	16.6	16.6	1.2	267	8.7	8.7	0.5			
7	301	2.3	2.0	-1.2	333	0.2	0.1	-0.2	77	3.6	-3.5	-0.8	292	4.8	4.4	-1.8	277	16.2	16.1	-2.1	267	15.6	15.6	0.9	276	8.1	8.0	-0.9			
8	234	3.6	2.9	2.1	225	0.6	0.4	0.4	69	4.2	-3.9	-1.5	272	5.7	5.7	-0.2	268	17.8	17.8	0.7	269	18.1	18.1	0.4	259	7.8	7.7	1.5			
9	276	2.0	2.0	-0.2	302	0.9	0.8	-0.5	99	3.0	-3.0	0.5	284	4.9	4.7	-1.2	277	15.3	15.2	-1.8	274	16.1	16.1	-1.1	322	2.3	1.4	-1.8			
10	285	2.7	2.6	-0.7	225	0.1	0.1	0.1	103	3.7	-3.6	0.8	276	5.4	5.4	-0.6	277	15.8	15.7	-1.8	263	15.1	15.0	1.8	329	2.3	1.2	-2.0			
11	288	4.2	4.0	-1.3	326	1.1	0.6	-0.9	90	2.7	-2.7	0.0	293	5.0	4.6	-2.0	286	14.8	14.2	-4.0	273	15.5	15.5	-0.8	234	5.8	4.7	3.4			
12	297	3.9	3.5	-1.8	284	0.8	0.8	-0.2	82	3.6	-3.6	-0.5	294	5.7	5.2	-2.3	277	15.4	15.3	-1.8	281	16.8	16.5	-3.3	305	7.6	6.2	-4.4			
13	301	3.7	3.2	-1.9	297	0.7	0.6	-0.3	81	4.3	-4.2	-0.7	307	4.9	3.9	-2.9	276	15.3	15.2	-1.6	262	18.2	18.0	2.5	281	10.3	10.1	-1.9			
14	293	2.1	1.9	-0.8	297	0.2	0.2	-0.1	87	5.1	-5.1	-0.3	343	3.7	1.1	-3.5	286	9.9	9.5	-2.7	282	13.9	13.6	-2.9	254	6.0	5.8	1.7			
15	284	2.5	2.4	-0.6	180	0.6	0.0	0.6	88	5.2	-5.2	-0.2	297	0.9	0.8	-0.4	269	14.2	14.2	0.3	265	15.9	15.8	1.4	234	6.2	5.0	3.6			
16	266	2.9	2.9	0.2	198	0.3	0.1	0.3	84	5.4	-5.4	-0.6	276	3.0	3.0	-0.3	259	14.2	13.9	2.7	257	17.9	17.4	4.0	294	3.4	3.1	-1.4			
17	297	3.9	3.5	-1.8	45	0.8	-0.6	-0.6	78	4.3	-4.2	-0.9	306	2.7	2.2	-1.6	254	12.0	11.5	3.4	256	13.3	12.9	3.2	291	3.0	2.8	-1.1			
18	318	4.7	3.1	-3.5	345	2.0	0.5	-1.9	96	4.0	-4.0	0.4	299	3.3	2.9	-1.6	275	10.7	10.7	-1.0	267	12.9	12.9	0.7	281	3.1	3.0	-0.6			
19	303	4.3	3.6	-2.3	357	2.0	0.1	-2.0	81	5.7	-5.6	-0.9	341	1.8	0.6	-1.7	280	8.4	8.3	-1.5	267	10.5	10.5	0.6	302	4.9	4.1	-2.6			
20	305	3.7	3.0	-2.1	347	2.2	0.5	-2.1	83	6.3	-6.2	-0.8	355	2.3	0.2	-2.3	268	11.1	11.1	0.3	268	12.4	12.4	0.4	279	5.0	4.9	-0.8			
21	293	2.5	2.3	-1.0	350	1.7	0.3	-1.7	82	4.2	-4.2	-0.6	300	2.0	1.7	-1.0	278	14.3	14.2	-2.0	261	14.0	13.8	2.2	235	4.5	3.7	2.6			
22	322	3.1	1.9	-2.4	337	2.8	1.1	-2.6	90	1.7	-1.7	0.0	325	3.3	1.9	-2.7	269	13.3	13.3	0.2	272	15.1	15.1	-0.5	268	6.9	6.9	0.3			
23	290	3.0	2.8	-1.0	332	2.6	1.2	-2.3	90	2.9	-2.9	0.0	310	3.1	2.4	-2.0	269	12.5	12.5	0.2	263	15.6	15.5	1.9	264	7.6	7.6	0.8			
24	247	2.6	2.4	1.0	340	3.5	1.2	-3.3	90	1.9	-1.9	0.0	282	4.3	4.2	-0.9	271	14.8	14.8	-0.3	272	18.6	18.6	-0.7	278	12.2	12.1	-1.7			
25	312	3.9	2.9	-2.6	344	3.7	1.0	-3.6	107	1.4	-1.3	0.4	319	3.3	2.2	-2.5	284	11.6	11.3	-2.8	265	16.5	16.4	1.3	265	10.1	10.1	0.9			
26	292	3.8	3.5	-1.4	330	2.0	1.0	-1.7	90	4.2	-4.2	0.0	334	2.5	1.1	-2.3	272	14.0	14.0	-0.6	261	17.2	17.0	2.6	323	5.9	3.5	-4.7			
27	280	2.9	2.9	-0.5	323	2.0	1.2	-1.6	96	3.9	-3.9	0.4	11	2.5	-0.5	-2.5	277	11.4	11.3	-1.4	274	13.5	13.5	-1.0	256	3.6	3.5	0.9			
28	277	2.4	2.4	-0.3	360	1.0	0.0	-1.0	86	4.7	-4.7	-0.3	340	3.0	1.0	-2.8	287	12.5	11.9	-3.7	271	15.9	15.9	-0.4	281	4.6	4.5	-0.9			
29	277	2.6	2.6	-0.3	345	2.0	0.5	-1.9	92	3.6	-3.6	0.1	355	1.1	0.1	-1.1	258	11.0	10.8	2.3	251	12.7	12.0	4.1	175	2.3	-0.2	2.3			
30	273	2.2	2.2	-0.1	328	1.9	1.0	-1.6	100	4.8	-4.7	0.8	293	1.5	1.4	-0.6	276	9.1	9.1	-0.9	259	15.4	15.1	3.0	257	7.3	7.1	1.6			
31	285	4.1	4.0	-1.1	329	2.3	1.2	-2.0	84	5.4	-5.4	-0.6	328	3.1	1.6	-2.6	267	11.3	11.3	0.5	266	14.3	14.3	1.0	284	7.7	7.5	-1.9			

Daily Normals of Upper Air Winds (1971-2000)

GOA

APRIL

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	299	2.3	2.0	-1.1	343	2.7	0.8	-2.6	84	3.8	-3.8	-0.4	350	1.1	0.2	-1.1	259	13.3	13.0	2.6	254	13.6	13.1	3.8	279	7.4	7.3	-1.2
2	299	3.8	3.3	-1.8	349	2.1	0.4	-2.1	96	3.8	-3.8	0.4	260	3.6	3.5	0.6	266	13.4	13.4	1.0	246	15.0	13.7	6.0	266	4.5	4.5	0.3
3	299	4.3	3.8	-2.1	336	2.4	1.0	-2.2	101	3.8	-3.7	0.7	261	2.4	2.4	0.4	267	13.6	13.6	0.8	250	13.5	12.7	4.5	205	2.6	1.1	2.4
4	304	4.0	3.3	-2.2	354	1.9	0.2	-1.9	99	5.1	-5.0	0.8	281	2.5	2.5	-0.5	256	11.7	11.3	2.9	243	16.1	14.3	7.4	256	3.3	3.2	0.8
5	295	3.5	3.2	-1.5	338	1.6	0.6	-1.5	101	5.6	-5.5	1.1	272	2.6	2.6	-0.1	267	11.9	11.9	0.6	243	13.1	11.7	6.0	185	2.2	0.2	2.2
6	294	3.5	3.2	-1.4	331	1.3	0.6	-1.1	89	4.1	-4.1	-0.1	18	2.2	-0.7	-2.1	281	9.5	9.3	-1.8	259	13.6	13.4	2.5	190	2.2	0.4	2.2
7	308	4.6	3.6	-2.8	353	1.6	0.2	-1.6	81	4.7	-4.6	-0.7	330	3.0	1.5	-2.6	277	10.8	10.7	-1.4	255	12.8	12.3	3.4	162	2.6	-0.8	2.5
8	292	3.8	3.5	-1.4	342	2.3	0.7	-2.2	88	3.7	-3.7	-0.1	308	1.1	0.9	-0.7	268	11.6	11.6	0.5	248	12.5	11.6	4.7	222	2.5	1.7	1.9
9	308	6.6	5.2	-4.1	358	3.5	0.1	-3.5	107	2.1	-2.0	0.6	281	2.5	2.5	-0.5	270	15.2	15.2	-0.1	259	19.6	19.2	3.8	227	5.0	3.6	3.4
10	305	4.5	3.7	-2.6	354	3.8	0.4	-3.8	85	3.8	-3.8	-0.3	318	1.2	0.8	-0.9	285	9.8	9.5	-2.5	260	13.2	13.0	2.3	278	2.2	2.2	-0.3
11	299	4.8	4.2	-2.3	341	2.4	0.8	-2.3	78	3.3	-3.2	-0.7	180	0.3	0.0	0.3	267	8.5	8.5	0.4	263	10.6	10.5	1.2	212	4.0	2.1	3.4
12	295	4.3	3.9	-1.8	345	3.4	0.9	-3.3	88	3.1	-3.1	-0.1	12	2.5	-0.5	-2.4	282	6.8	6.7	-1.4	277	7.9	7.8	-1.0	144	1.7	-1.0	1.4
13	290	2.7	2.5	-0.9	322	1.6	1.0	-1.3	88	2.6	-2.6	-0.1	39	0.6	-0.4	-0.5	275	8.4	8.4	-0.7	250	11.1	10.4	3.8	252	0.9	0.9	0.3
14	298	3.8	3.4	-1.8	330	1.6	0.8	-1.4	104	4.5	-4.4	1.1	256	3.4	3.3	0.8	259	13.4	13.1	2.6	256	13.2	12.8	3.1	261	7.3	7.2	1.2
15	289	3.7	3.5	-1.2	356	2.8	0.2	-2.8	88	3.1	-3.1	-0.1	254	1.5	1.4	0.4	265	10.1	10.1	0.9	258	13.0	12.7	2.6	201	4.0	1.4	3.7
16	304	4.3	3.6	-2.4	356	2.8	0.2	-2.8	101	2.1	-2.1	0.4	324	0.9	0.5	-0.7	265	10.9	10.9	1.0	251	17.6	16.6	5.7	259	2.6	2.6	0.5
17	320	5.0	3.2	-3.8	360	2.8	0.0	-2.8	80	3.4	-3.3	-0.6	338	1.1	0.4	-1.0	264	9.0	9.0	0.9	265	14.7	14.6	1.4	242	6.8	6.0	3.2
18	301	4.4	3.8	-2.3	345	3.0	0.8	-2.9	76	4.0	-3.9	-1.0	42	1.5	-1.0	-1.1	260	9.3	9.2	1.6	253	13.3	12.7	3.9	202	2.9	1.1	2.7
19	311	4.5	3.4	-3.0	357	2.0	0.1	-2.0	76	5.0	-4.9	-1.2	74	1.9	-1.8	-0.5	245	10.3	9.4	4.3	234	15.9	12.8	9.4	215	4.4	2.5	3.6
20	309	5.8	4.5	-3.7	338	2.9	1.1	-2.7	78	4.8	-4.7	-1.0	243	0.2	0.2	0.1	262	10.9	10.8	1.5	247	17.2	15.9	6.6	262	1.4	1.4	0.2
21	304	5.4	4.5	-3.0	345	2.0	0.5	-1.9	95	3.3	-3.3	0.3	288	0.6	0.6	-0.2	256	12.5	12.1	3.0	244	16.3	14.6	7.2	233	5.3	4.2	3.2
22	312	4.7	3.5	-3.1	349	2.5	0.5	-2.5	90	2.8	-2.8	0.0	10	1.1	-0.2	-1.1	263	11.2	11.1	1.4	256	15.2	14.7	3.7	257	2.2	2.1	0.5
23	311	5.5	4.1	-3.6	349	2.1	0.4	-2.1	73	4.2	-4.0	-1.2	308	2.3	1.8	-1.4	255	10.9	10.5	2.8	253	16.6	15.9	4.9	202	0.5	0.2	0.5
24	306	4.9	4.0	-2.9	351	2.5	0.4	-2.5	69	3.6	-3.4	-1.3	317	2.3	1.6	-1.7	256	11.3	11.0	2.7	254	13.4	12.9	3.6	274	6.5	6.5	-0.5
25	285	2.8	2.7	-0.7	355	2.5	0.2	-2.5	92	2.6	-2.6	0.1	349	3.1	0.6	-3.0	288	8.6	8.2	-2.6	260	10.4	10.2	1.8	151	2.1	-1.0	1.8
26	293	3.8	3.5	-1.5	333	3.3	1.5	-2.9	76	3.4	-3.3	-0.8	360	2.2	0.0	-2.2	291	9.1	8.5	-3.2	259	11.7	11.5	2.2	118	1.9	-1.7	0.9
27	304	3.2	2.7	-1.8	355	2.1	0.2	-2.1	85	3.5	-3.5	-0.3	25	2.6	-1.1	-2.4	278	6.8	6.7	-0.9	248	7.6	7.1	2.8	104	4.6	-4.5	1.1
28	290	4.1	3.9	-1.4	356	2.6	0.2	-2.6	74	3.2	-3.1	-0.9	18	2.2	-0.7	-2.1	296	6.9	6.2	-3.0	255	9.8	9.5	2.6	108	5.8	-5.5	1.8
29	305	5.1	4.2	-2.9	342	3.8	1.2	-3.6	69	4.4	-4.1	-1.6	35	2.4	-1.4	-2.0	279	7.7	7.6	-1.2	262	11.4	11.3	1.6	132	4.0	-3.0	2.7
30	308	4.3	3.4	-2.7	355	4.4	0.4	-4.4	61	2.3	-2.0	-1.1	8	1.4	-0.2	-1.4	280	8.4	8.3	-1.5	270	7.8	7.8	0.0	108	5.6	-5.3	1.7

Daily Normals of Upper Air Winds (1971-2000)

GOA

MAY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	309	4.6	3.6	-2.9	349	3.7	0.7	-3.6	55	1.9	-1.6	-1.1	9	2.0	-0.3	-2.0	284	7.1	6.9	-1.7	248	7.3	6.8	2.7	114	4.7	-4.3	1.9
2	314	4.5	3.2	-3.1	344	3.7	1.0	-3.6	119	1.0	-0.9	0.5	333	2.0	0.9	-1.8	264	8.7	8.7	0.9	251	9.4	8.9	3.0	137	7.3	-5.0	5.3
3	305	4.7	3.9	-2.7	348	3.8	0.8	-3.7	96	2.7	-2.7	0.3	327	2.0	1.1	-1.7	265	6.8	6.8	0.6	239	11.2	9.6	5.7	130	3.4	-2.6	2.2
4	309	6.5	5.1	-4.1	354	3.1	0.3	-3.1	88	3.7	-3.7	-0.1	62	2.1	-1.9	-1.0	275	7.7	7.7	-0.7	231	9.7	7.6	6.1	111	7.4	-6.9	2.6
5	315	4.1	2.9	-2.9	353	2.5	0.3	-2.5	71	3.4	-3.2	-1.1	61	1.8	-1.6	-0.9	272	6.5	6.5	-0.2	260	7.4	7.3	1.3	118	5.2	-4.6	2.4
6	324	5.1	3.0	-4.1	333	3.0	1.4	-2.7	91	4.5	-4.5	0.1	49	1.8	-1.4	-1.2	275	5.3	5.3	-0.5	241	4.7	4.1	2.3	148	2.5	-1.3	2.1
7	278	4.1	4.1	-0.6	336	1.7	0.7	-1.6	84	4.5	-4.5	-0.5	29	3.1	-1.5	-2.7	246	4.9	4.5	2.0	255	5.4	5.2	1.4	83	3.1	-3.1	-0.4
8	291	4.5	4.2	-1.6	343	3.0	0.9	-2.9	84	3.1	-3.1	-0.3	37	3.1	-1.9	-2.5	277	3.3	3.3	-0.4	259	4.7	4.6	0.9	93	2.1	-2.1	0.1
9	300	4.4	3.8	-2.2	345	2.8	0.7	-2.7	64	3.9	-3.5	-1.7	55	3.5	-2.9	-2.0	238	4.4	3.7	2.3	225	4.5	3.2	3.2	93	10.6	-10.6	0.6
10	297	5.6	5.0	-2.5	348	4.4	0.9	-4.3	46	3.3	-2.4	-2.3	58	2.6	-2.2	-1.4	252	2.5	2.4	0.8	234	4.8	3.9	2.8	108	9.2	-8.7	2.9
11	303	5.3	4.4	-2.9	352	4.1	0.6	-4.1	44	3.2	-2.2	-2.3	58	2.5	-2.1	-1.3	260	4.2	4.1	0.7	232	5.1	4.0	3.1	94	9.3	-9.3	0.7
12	306	4.8	3.9	-2.8	353	4.3	0.5	-4.3	38	2.4	-1.5	-1.9	48	2.5	-1.9	-1.7	265	3.3	3.3	0.3	201	3.4	1.2	3.2	96	6.5	-6.5	0.7
13	301	5.5	4.7	-2.8	342	4.2	1.3	-4.0	41	2.9	-1.9	-2.2	27	3.4	-1.5	-3.0	11	0.5	-0.1	-0.5	180	2.5	0.0	2.5	118	7.8	-6.9	3.6
14	290	5.8	5.4	-2.0	325	3.3	1.9	-2.7	58	2.6	-2.2	-1.4	47	5.4	-4.0	-3.7	16	0.7	-0.2	-0.7	189	1.9	0.3	1.9	92	10.7	-10.7	0.4
15	292	4.8	4.5	-1.8	354	3.6	0.4	-3.6	41	4.1	-2.7	-3.1	61	4.6	-4.0	-2.2	202	2.2	0.8	2.0	180	3.6	0.0	3.6	112	8.6	-8.0	3.2
16	270	4.7	4.7	0.0	334	2.5	1.1	-2.3	67	3.9	-3.6	-1.5	72	3.5	-3.3	-1.1	148	0.9	-0.5	0.8	165	5.3	-1.4	5.1	107	10.5	-10.1	3.0
17	298	4.7	4.1	-2.2	339	2.6	0.9	-2.4	56	2.3	-1.9	-1.3	65	4.4	-4.0	-1.9	234	0.9	0.7	0.5	142	2.9	-1.8	2.3	111	13.0	-12.1	4.7
18	282	5.0	4.9	-1.0	326	4.1	2.3	-3.4	349	1.6	0.3	-1.6	27	2.9	-1.3	-2.6	254	1.9	1.8	0.5	169	3.8	-0.7	3.7	97	11.0	-10.9	1.4
19	303	6.2	5.2	-3.4	319	5.5	3.6	-4.2	343	2.1	0.6	-2.0	25	4.4	-1.9	-4.0	236	0.7	0.6	0.4	191	7.1	1.3	7.0	104	10.2	-9.9	2.5
20	291	5.6	5.2	-2.0	312	3.9	2.9	-2.6	18	2.5	-0.8	-2.4	31	6.0	-3.1	-5.1	90	0.1	-0.1	0.0	179	4.1	-0.1	4.1	96	9.5	-9.4	1.0
21	297	5.6	5.0	-2.6	313	3.5	2.6	-2.4	15	2.3	-0.6	-2.2	52	3.7	-2.9	-2.3	225	2.8	2.0	2.0	187	4.8	0.6	4.8	101	7.1	-7.0	1.3
22	277	5.4	5.4	-0.7	331	3.8	1.8	-3.3	60	1.6	-1.4	-0.8	49	2.9	-2.2	-1.9	119	1.0	-0.9	0.5	162	4.8	-1.5	4.6	97	13.7	-13.6	1.7
23	278	5.1	5.1	-0.7	332	3.8	1.8	-3.4	60	0.8	-0.7	-0.4	55	2.9	-2.4	-1.7	275	2.5	2.5	-0.2	149	2.7	-1.4	2.3	100	11.4	-11.2	2.0
24	300	6.0	5.2	-3.0	325	3.8	2.2	-3.1	30	1.4	-0.7	-1.2	49	3.3	-2.5	-2.2	10	1.7	-0.3	-1.7	117	2.9	-2.6	1.3	105	15.8	-15.3	4.0
25	297	5.9	5.2	-2.7	314	3.7	2.7	-2.6	35	1.9	-1.1	-1.6	47	4.9	-3.6	-3.3	5	3.4	-0.3	-3.4	78	1.4	-1.4	-0.3	109	9.6	-9.1	3.1
26	294	5.5	5.0	-2.2	313	4.0	2.9	-2.7	45	2.0	-1.4	-1.4	62	6.2	-5.5	-2.9	73	3.9	-3.7	-1.1	108	6.0	-5.7	1.9	93	16.4	-16.4	0.9
27	308	6.8	5.3	-4.2	328	4.6	2.4	-3.9	56	3.4	-2.8	-1.9	70	3.3	-3.1	-1.1	93	3.3	-3.3	0.2	118	5.9	-5.2	2.8	105	15.6	-15.1	4.0
28	287	6.7	6.4	-1.9	320	4.0	2.6	-3.1	74	2.2	-2.1	-0.6	90	3.1	-3.1	0.0	119	2.5	-2.2	1.2	117	4.2	-3.8	1.9	89	13.9	-13.9	-0.2
29	294	5.9	5.4	-2.4	331	3.7	1.8	-3.2	23	1.5	-0.6	-1.4	78	2.5	-2.4	-0.5	161	1.8	-0.6	1.7	144	4.4	-2.6	3.6	112	9.5	-8.8	3.6
30	300	5.1	4.4	-2.5	312	3.1	2.3	-2.1	99	1.2	-1.2	0.2	92	2.6	-2.6	0.1	142	2.4	-1.5	1.9	107	5.1	-4.9	1.5	106	18.0	-17.3	5.1
31	289	5.4	5.1	-1.8	297	3.1	2.8	-1.4	96	1.0	-1.0	0.1	76	2.5	-2.4	-0.6	100	2.3	-2.3	0.4	127	5.5	-4.4	3.3	102	21.0	-20.6	4.3

Daily Normals of Upper Air Winds (1971-2000)

GOA

JUNE

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	295	5.9	5.3	-2.5	293	2.5	2.3	-1.0	14	0.4	-0.1	-0.4	135	1.0	-0.7	0.7	131	3.8	-2.9	2.5	120	6.9	-6.0	3.4	103	18.6	-18.1	4.3			
2	288	5.9	5.6	-1.8	297	2.8	2.5	-1.3	315	0.6	0.4	-0.4	48	1.3	-1.0	-0.9	101	3.3	-3.2	0.6	106	9.0	-8.6	2.5	102	21.6	-21.1	4.4			
3	282	4.2	4.1	-0.9	287	3.1	3.0	-0.9	81	1.2	-1.2	-0.2	99	1.2	-1.2	0.2	118	4.2	-3.7	2.0	98	8.1	-8.0	1.1	100	19.9	-19.6	3.4			
4	277	4.9	4.9	-0.6	284	3.4	3.3	-0.8	63	1.1	-1.0	-0.5	90	1.7	-1.7	0.0	90	5.1	-5.1	0.0	96	10.1	-10.0	1.1	96	24.2	-24.1	2.6			
5	272	5.0	5.0	-0.2	277	4.6	4.6	-0.6	249	1.9	1.8	0.7	90	1.6	-1.6	0.0	101	5.2	-5.1	1.0	107	9.0	-8.6	2.7	100	18.3	-18.0	3.3			
6	267	4.0	4.0	0.2	274	4.2	4.2	-0.3	146	0.4	-0.2	0.3	117	2.7	-2.4	1.2	100	4.1	-4.0	0.7	87	8.6	-8.6	-0.4	97	23.9	-23.7	2.8			
7	241	6.6	5.8	3.2	260	6.3	6.2	1.1	246	2.7	2.5	1.1	157	1.3	-0.5	1.2	90	5.3	-5.3	0.0	95	10.7	-10.7	1.0	94	21.2	-21.2	1.3			
8	245	5.0	4.5	2.1	261	5.7	5.6	0.9	258	5.2	5.1	1.1	156	2.2	-0.9	2.0	108	6.3	-6.0	2.0	97	13.2	-13.1	1.7	94	22.6	-22.6	1.5			
9	240	3.8	3.3	1.9	263	5.9	5.9	0.7	252	4.3	4.1	1.3	225	1.3	0.9	0.9	89	6.1	-6.1	-0.1	91	12.6	-12.6	0.2	84	22.4	-22.3	-2.3			
10	255	8.3	8.0	2.2	272	7.8	7.8	-0.3	278	5.7	5.6	-0.8	270	1.1	1.1	0.0	90	5.4	-5.4	0.0	93	13.5	-13.5	0.7	94	24.4	-24.3	1.7			
11	286	7.4	7.1	-2.1	274	8.6	8.6	-0.6	279	6.2	6.1	-1.0	341	1.8	0.6	-1.7	88	4.7	-4.7	-0.2	94	13.7	-13.7	0.9	88	26.8	-26.8	-1.0			
12	300	6.9	6.0	-3.4	285	7.9	7.6	-2.1	276	4.9	4.9	-0.5	333	1.6	0.7	-1.4	102	4.8	-4.7	1.0	90	13.2	-13.2	0.0	92	25.6	-25.6	1.0			
13	277	7.2	7.1	-0.9	282	8.2	8.0	-1.7	279	4.4	4.3	-0.7	250	2.3	2.2	0.8	79	7.0	-6.9	-1.4	87	13.0	-13.0	-0.7	91	23.2	-23.2	0.6			
14	281	7.6	7.5	-1.5	279	7.8	7.7	-1.2	263	5.9	5.9	0.7	243	1.3	1.2	0.6	87	6.6	-6.6	-0.4	78	13.0	-12.7	-2.8	99	25.0	-24.7	4.0			
15	287	8.7	8.3	-2.6	283	7.4	7.2	-1.7	270	2.7	2.7	0.0	204	1.2	0.5	1.1	82	6.9	-6.8	-0.9	83	15.0	-14.9	-1.8	97	32.0	-31.7	4.1			
16	273	8.2	8.2	-0.5	281	9.0	8.8	-1.7	272	5.9	5.9	-0.2	235	1.6	1.3	0.9	87	7.2	-7.2	-0.4	93	13.9	-13.9	0.7	88	28.6	-28.6	-0.8			
17	281	9.1	8.9	-1.8	274	10.2	10.2	-0.8	270	7.4	7.4	0.0	180	1.0	0.0	1.0	89	4.9	-4.9	-0.1	79	14.1	-13.8	-2.8	88	26.6	-26.6	-1.1			
18	269	9.4	9.4	0.1	264	10.8	10.7	1.1	273	9.2	9.2	-0.5	273	3.3	3.3	-0.2	71	5.0	-4.7	-1.6	80	15.0	-14.8	-2.7	87	33.4	-33.4	-1.6			
19	270	9.1	9.1	0.0	279	12.4	12.2	-2.0	272	9.5	9.5	-0.4	273	5.1	5.1	-0.3	87	6.8	-6.8	-0.3	86	17.0	-17.0	-1.2	93	25.5	-25.5	1.2			
20	271	9.6	9.6	-0.2	281	10.7	10.5	-2.0	284	8.1	7.8	-2.0	288	3.9	3.7	-1.2	88	6.9	-6.9	-0.3	84	16.5	-16.4	-1.8	88	26.1	-26.1	-0.7			
21	269	10.0	10.0	0.2	278	10.2	10.1	-1.4	279	9.3	9.2	-1.4	268	3.7	3.7	0.1	84	8.5	-8.5	-0.9	92	18.1	-18.1	0.5	86	28.9	-28.8	-2.0			
22	271	10.6	10.6	-0.1	277	10.8	10.7	-1.4	279	8.4	8.3	-1.3	276	3.8	3.8	-0.4	76	7.1	-6.9	-1.7	86	21.6	-21.5	-1.5	83	27.3	-27.1	-3.1			
23	265	8.8	8.8	0.7	283	10.5	10.2	-2.3	277	9.3	9.2	-1.2	270	4.3	4.3	0.0	89	6.6	-6.6	-0.1	87	18.4	-18.4	-1.0	100	30.9	-30.5	5.2			
24	270	9.3	9.3	0.0	271	11.0	11.0	-0.1	274	9.9	9.9	-0.7	264	4.7	4.7	0.5	89	7.1	-7.1	-0.1	86	20.0	-20.0	-1.4	95	28.0	-27.9	2.4			
25	278	9.0	8.9	-1.3	271	11.7	11.7	-0.2	269	8.7	8.7	0.1	267	4.1	4.1	0.2	71	5.7	-5.4	-1.9	84	19.7	-19.6	-2.2	98	35.0	-34.7	4.6			
26	276	10.3	10.3	-1.0	272	11.6	11.6	-0.4	271	10.1	10.1	-0.2	268	4.7	4.7	0.2	85	7.5	-7.5	-0.7	84	19.8	-19.7	-2.1	90	30.3	-30.3	-0.1			
27	269	10.5	10.5	0.1	267	11.4	11.4	0.6	272	9.6	9.6	-0.3	261	3.2	3.2	0.5	92	7.3	-7.3	0.2	88	22.9	-22.9	-0.7	90	33.5	-33.5	-0.1			
28	268	10.2	10.2	0.3	270	11.5	11.5	0.1	276	8.8	8.8	-0.9	270	1.7	1.7	0.0	91	7.4	-7.4	0.1	89	20.1	-20.1	-0.3	89	31.7	-31.7	-0.6			
29	267	9.5	9.5	0.5	268	10.5	10.5	0.4	270	8.3	8.3	0.0	255	2.0	1.9	0.5	95	9.1	-9.1	0.8	92	22.1	-22.1	0.8	88	32.3	-32.3	-1.3			
30	269	8.4	8.4	0.1	271	10.8	10.8	-0.1	266	9.2	9.2	0.7	243	3.7	3.3	1.7	100	7.8	-7.7	1.4	91	22.8	-22.8	0.5	86	29.5	-29.4	-2.2			

Daily Normals of Upper Air Winds (1971-2000)

103

GOA

JULY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	269	10.5	10.5	0.2	268	10.2	10.2	0.4	275	9.3	9.3	-0.8	262	2.1	2.1	0.3	79	8.0	-7.9	-1.5	93	24.4	-24.4	1.3	91	30.6	-30.6	0.8			
2	274	11.0	11.0	-0.8	269	12.0	12.0	0.2	272	8.6	8.6	-0.3	272	2.5	2.5	-0.1	88	9.6	-9.6	-0.4	87	21.1	-21.1	-1.1	97	33.5	-33.3	3.8			
3	280	8.8	8.7	-1.5	269	11.3	11.3	0.1	274	8.7	8.7	-0.6	279	3.9	3.9	-0.6	80	9.7	-9.5	-1.7	91	24.2	-24.2	0.6	86	35.4	-35.3	-2.5			
4	278	9.1	9.0	-1.3	279	10.1	10.0	-1.6	279	8.5	8.4	-1.4	328	1.5	0.8	-1.3	91	10.5	-10.5	0.2	91	24.9	-24.9	0.3	95	36.4	-36.3	3.1			
5	267	9.1	9.1	0.5	279	10.3	10.2	-1.6	272	9.4	9.4	-0.4	265	1.2	1.2	0.1	81	8.0	-7.9	-1.2	89	22.0	-22.0	-0.4	90	39.2	-39.2	0.2			
6	289	9.9	9.4	-3.2	279	11.0	10.9	-1.8	277	6.1	6.1	-0.7	313	1.9	1.4	-1.3	87	9.5	-9.5	-0.5	86	20.6	-20.6	-1.3	96	32.2	-32.0	3.3			
7	274	9.6	9.6	-0.7	276	12.6	12.5	-1.3	282	9.7	9.5	-2.1	274	3.2	3.2	-0.2	80	9.0	-8.9	-1.6	81	19.7	-19.5	-3.0	82	32.7	-32.4	-4.3			
8	261	9.5	9.4	1.5	277	11.3	11.2	-1.4	288	7.0	6.6	-2.2	257	0.9	0.9	0.2	87	10.5	-10.5	-0.5	91	23.0	-23.0	0.5	98	36.8	-36.5	5.0			
9	269	12.4	12.4	0.3	276	12.4	12.3	-1.4	279	9.7	9.6	-1.5	267	3.9	3.9	0.2	87	9.4	-9.4	-0.5	84	22.7	-22.6	-2.2	84	35.5	-35.3	-3.6			
10	272	11.4	11.4	-0.3	276	11.2	11.1	-1.1	275	9.1	9.1	-0.8	287	1.0	1.0	-0.3	82	9.8	-9.7	-1.3	91	22.3	-22.3	0.3	90	34.0	-34.0	0.1			
11	265	12.1	12.0	1.1	274	11.3	11.3	-0.8	274	10.5	10.5	-0.7	277	4.3	4.3	-0.5	86	8.3	-8.3	-0.6	88	22.7	-22.7	-0.7	88	41.0	-41.0	-1.3			
12	267	11.7	11.7	0.6	272	11.4	11.4	-0.4	268	9.6	9.6	0.4	261	3.0	3.0	0.5	83	9.2	-9.1	-1.1	92	21.4	-21.4	0.7	89	32.5	-32.5	-0.7			
13	268	10.2	10.2	0.3	273	10.7	10.7	-0.5	269	9.9	9.9	0.2	242	2.1	1.9	1.0	88	9.3	-9.3	-0.4	90	24.2	-24.2	-0.1	89	33.0	-33.0	-0.8			
14	275	9.8	9.8	-0.8	275	10.5	10.5	-0.9	279	9.4	9.3	-1.4	270	1.1	1.1	0.0	93	9.0	-9.0	0.4	87	24.9	-24.9	-1.1	88	35.2	-35.2	-1.0			
15	272	11.9	11.9	-0.4	276	12.5	12.4	-1.4	278	10.1	10.0	-1.4	250	3.3	3.1	1.1	82	8.1	-8.0	-1.1	91	22.3	-22.3	0.4	89	35.8	-35.8	-0.6			
16	268	13.1	13.1	0.4	273	11.5	11.5	-0.7	274	10.6	10.6	-0.7	352	0.7	0.1	-0.7	83	8.6	-8.5	-1.0	90	23.0	-23.0	0.2	86	39.1	-39.0	-2.8			
17	275	11.2	11.2	-0.9	272	12.1	12.1	-0.4	271	10.4	10.4	-0.2	261	2.4	2.4	0.4	94	10.6	-10.6	0.7	93	22.7	-22.7	1.0	90	37.1	-37.1	-0.1			
18	272	11.8	11.8	-0.5	270	12.0	12.0	0.1	271	11.0	11.0	-0.2	237	3.3	2.8	1.8	87	8.9	-8.9	-0.5	91	22.8	-22.8	0.3	93	28.4	-28.4	1.6			
19	271	12.6	12.6	-0.3	274	12.2	12.2	-0.8	270	10.4	10.4	0.0	259	3.6	3.5	0.7	92	10.4	-10.4	0.4	86	20.7	-20.6	-1.6	93	31.7	-31.7	1.4			
20	268	9.9	9.9	0.4	276	11.4	11.3	-1.1	268	9.5	9.5	0.4	279	3.3	3.3	-0.5	96	10.4	-10.3	1.1	89	22.4	-22.4	-0.3	87	35.7	-35.6	-2.0			
21	271	10.5	10.5	-0.2	280	11.8	11.6	-2.1	276	9.3	9.3	-0.9	276	3.7	3.7	-0.4	94	8.9	-8.9	0.6	83	23.4	-23.2	-2.7	100	31.0	-30.5	5.3			
22	276	10.0	9.9	-1.1	280	11.8	11.6	-2.0	271	8.9	8.9	-0.2	271	4.0	4.0	-0.1	85	8.4	-8.4	-0.8	89	22.2	-22.2	-0.3	90	30.4	-30.4	-0.2			
23	286	10.5	10.1	-2.9	280	8.9	8.8	-1.6	283	8.0	7.8	-1.8	320	1.6	1.0	-1.2	91	11.0	-11.0	0.2	93	22.3	-22.3	1.3	93	33.5	-33.5	1.5			
24	285	11.4	11.0	-2.9	278	11.1	11.0	-1.5	279	9.1	9.0	-1.5	270	1.9	1.9	0.0	89	10.3	-10.3	-0.1	89	22.5	-22.5	-0.2	89	30.9	-30.9	-0.6			
25	273	10.8	10.8	-0.5	277	11.7	11.6	-1.5	274	9.3	9.3	-0.6	267	1.9	1.9	0.1	97	9.6	-9.5	1.1	93	22.6	-22.6	1.3	92	35.6	-35.6	1.5			
26	279	12.9	12.7	-2.0	280	12.1	11.9	-2.1	279	10.2	10.1	-1.6	280	5.0	4.9	-0.9	80	9.0	-8.9	-1.6	88	22.0	-22.0	-0.6	90	34.5	-34.5	-0.1			
27	282	11.9	11.7	-2.4	281	12.7	12.5	-2.4	278	10.9	10.8	-1.6	284	4.5	4.4	-1.1	94	7.6	-7.6	0.5	89	22.5	-22.5	-0.2	92	35.5	-35.5	1.2			
28	284	13.2	12.8	-3.2	279	12.0	11.9	-1.8	281	9.9	9.7	-1.8	272	2.9	2.9	-0.1	86	9.0	-9.0	-0.6	90	22.0	-22.0	0.1	87	33.8	-33.8	-1.8			
29	278	13.5	13.4	-1.9	281	12.6	12.4	-2.3	278	10.2	10.1	-1.5	276	3.1	3.1	-0.3	96	9.0	-9.0	0.9	94	22.1	-22.0	1.6	90	32.2	-32.2	0.1			
30	271	11.8	11.8	-0.2	274	12.2	12.2	-0.8	277	10.8	10.7	-1.3	281	4.2	4.1	-0.8	93	9.8	-9.8	0.5	92	21.8	-21.8	0.8	86	29.6	-29.5	-2.3			
31	276	12.9	12.8	-1.4	285	12.0	11.6	-3.0	280	10.2	10.1	-1.7	275	2.3	2.3	-0.2	89	8.6	-8.6	-0.2	91	21.1	-21.1	0.3	95	27.5	-27.4	2.4			

Daily Normals of Upper Air Winds (1971-2000)

GOA

AUGUST

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	278	12.4	12.3	-1.8	284	12.4	12.0	-3.1	282	10.2	10.0	-2.2	325	2.4	1.4	-2.0	78	9.5	-9.3	-1.9	91	25.1	-25.1	0.5	91	33.1	-33.1	0.5
2	276	11.6	11.5	-1.2	281	12.0	11.8	-2.3	282	10.3	10.1	-2.1	293	3.9	3.6	-1.5	78	8.9	-8.7	-1.8	88	21.0	-21.0	-0.9	91	32.8	-32.8	0.3
3	280	12.2	12.0	-2.1	280	10.9	10.7	-1.8	279	11.1	11.0	-1.7	273	2.1	2.1	-0.1	84	7.9	-7.9	-0.8	90	22.7	-22.7	-0.1	86	34.3	-34.2	-2.5
4	283	10.3	10.0	-2.4	280	10.5	10.3	-1.8	278	9.1	9.0	-1.3	283	2.3	2.2	-0.5	92	8.5	-8.5	0.3	89	22.4	-22.4	-0.5	90	34.5	-34.5	0.3
5	281	10.2	10.0	-2.0	281	10.7	10.5	-2.0	278	9.1	9.0	-1.2	256	2.1	2.0	0.5	87	10.3	-10.3	-0.6	91	25.7	-25.7	0.3	94	33.1	-33.0	2.2
6	283	9.8	9.6	-2.2	281	10.2	10.0	-1.9	282	9.0	8.8	-1.9	265	3.2	3.2	0.3	77	11.9	-11.6	-2.6	88	23.0	-23.0	-0.8	92	31.0	-31.0	1.2
7	283	9.1	8.9	-2.0	283	11.7	11.4	-2.6	277	10.4	10.3	-1.3	299	4.5	3.9	-2.2	80	8.2	-8.1	-1.4	91	23.2	-23.2	0.5	92	30.5	-30.5	0.8
8	282	8.9	8.7	-1.8	277	12.1	12.0	-1.4	280	11.9	11.7	-2.0	280	4.0	3.9	-0.7	74	6.4	-6.1	-1.8	86	21.9	-21.8	-1.6	86	33.6	-33.5	-2.2
9	282	9.8	9.6	-2.1	283	12.5	12.2	-2.8	284	12.4	12.0	-3.0	273	4.3	4.3	-0.2	86	7.9	-7.9	-0.6	90	21.0	-21.0	-0.1	89	33.7	-33.7	-0.4
10	274	10.6	10.6	-0.8	277	11.9	11.8	-1.4	277	11.1	11.0	-1.3	276	3.0	3.0	-0.3	92	9.6	-9.6	0.4	89	22.4	-22.4	-0.5	90	33.7	-33.7	0.2
11	276	12.1	12.0	-1.3	282	12.3	12.0	-2.6	278	10.7	10.6	-1.5	273	3.9	3.9	-0.2	81	9.4	-9.3	-1.4	94	21.1	-21.0	1.6	84	32.7	-32.5	-3.3
12	275	9.4	9.4	-0.9	280	12.1	11.9	-2.2	279	11.1	11.0	-1.7	283	4.1	4.0	-0.9	84	9.7	-9.6	-1.0	94	23.4	-23.4	1.5	86	30.9	-30.8	-1.9
13	275	10.7	10.7	-0.9	284	12.2	11.9	-2.9	276	9.8	9.7	-1.0	279	1.3	1.3	-0.2	86	8.8	-8.8	-0.6	89	23.8	-23.8	-0.5	89	32.4	-32.4	-0.4
14	286	9.1	8.7	-2.5	279	10.2	10.1	-1.6	278	8.3	8.2	-1.1	279	3.2	3.2	-0.5	93	9.0	-9.0	0.5	93	22.5	-22.5	1.2	85	32.4	-32.3	-2.7
15	288	7.4	7.0	-2.3	282	11.2	10.9	-2.4	275	9.4	9.4	-0.9	286	1.8	1.7	-0.5	86	11.3	-11.3	-0.8	90	26.0	-26.0	0.2	90	34.9	-34.9	0.2
16	288	9.4	8.9	-2.9	280	11.0	10.8	-2.0	284	9.8	9.5	-2.4	290	2.7	2.5	-0.9	89	9.0	-9.0	-0.2	89	22.4	-22.4	-0.3	87	33.4	-33.4	-1.6
17	295	11.0	10.0	-4.6	291	10.2	9.5	-3.6	287	8.1	7.7	-2.4	299	1.0	0.9	-0.5	84	10.1	-10.1	-1.0	90	21.7	-21.7	0.1	91	30.8	-30.8	0.5
18	296	10.9	9.8	-4.7	285	11.7	11.3	-3.0	287	9.3	8.9	-2.8	252	1.9	1.8	0.6	93	9.1	-9.1	0.5	100	24.1	-23.7	4.1	90	31.1	-31.1	0.0
19	287	9.0	8.6	-2.6	282	11.6	11.4	-2.4	286	10.0	9.6	-2.8	270	2.0	2.0	0.0	93	9.8	-9.8	0.5	89	24.1	-24.1	-0.6	89	30.5	-30.5	-0.4
20	290	10.8	10.1	-3.7	287	10.6	10.1	-3.1	281	9.1	8.9	-1.8	267	1.7	1.7	0.1	80	9.5	-9.4	-1.6	89	21.6	-21.6	-0.3	88	32.5	-32.5	-1.2
21	286	10.0	9.6	-2.7	289	10.4	9.8	-3.4	283	8.6	8.4	-1.9	295	1.4	1.3	-0.6	88	8.3	-8.3	-0.3	95	20.9	-20.8	1.7	93	32.2	-32.2	1.7
22	289	8.3	7.8	-2.7	287	10.1	9.7	-2.9	282	8.5	8.3	-1.8	300	0.8	0.7	-0.4	89	7.3	-7.3	-0.1	91	19.9	-19.9	0.2	92	38.4	-38.4	1.1
23	291	9.4	8.8	-3.3	287	9.0	8.6	-2.7	282	8.4	8.2	-1.7	216	1.4	0.8	1.1	98	9.7	-9.6	1.3	93	21.4	-21.4	1.1	96	29.4	-29.2	3.1
24	274	8.1	8.1	-0.5	284	9.2	8.9	-2.3	281	8.7	8.5	-1.7	231	1.4	1.1	0.9	94	9.6	-9.6	0.6	93	23.3	-23.3	1.3	89	31.4	-31.4	-0.3
25	281	11.2	11.0	-2.2	284	10.1	9.8	-2.5	280	8.9	8.8	-1.5	283	2.6	2.5	-0.6	89	9.1	-9.1	-0.1	93	21.9	-21.9	1.1	87	30.3	-30.3	-1.7
26	284	10.6	10.3	-2.6	288	10.4	9.9	-3.2	281	8.0	7.9	-1.5	282	2.4	2.3	-0.5	85	8.9	-8.9	-0.8	92	20.6	-20.6	0.8	91	28.2	-28.2	0.6
27	280	10.5	10.3	-1.8	289	9.7	9.2	-3.1	285	8.6	8.3	-2.2	305	2.9	2.4	-1.7	83	7.6	-7.5	-0.9	87	20.3	-20.3	-0.9	87	27.1	-27.1	-1.2
28	289	11.0	10.4	-3.6	284	10.6	10.3	-2.5	282	8.5	8.3	-1.7	278	2.9	2.9	-0.4	83	6.5	-6.5	-0.8	90	17.4	-17.4	0.0	89	27.6	-27.6	-0.6
29	284	9.6	9.3	-2.4	282	10.2	10.0	-2.1	278	9.5	9.4	-1.3	267	3.7	3.7	0.2	93	8.3	-8.3	0.4	87	19.7	-19.7	-0.9	92	26.2	-26.2	0.9
30	289	8.6	8.1	-2.8	283	9.6	9.3	-2.2	276	8.0	8.0	-0.8	261	2.5	2.5	0.4	82	9.1	-9.0	-1.3	91	20.9	-20.9	0.4	94	25.3	-25.2	1.7
31	284	10.0	9.7	-2.5	286	8.7	8.4	-2.4	274	7.9	7.9	-0.5	258	2.4	2.3	0.5	87	10.0	-10.0	-0.5	93	24.6	-24.6	1.5	93	28.0	-28.0	1.4

Daily Normals of Upper Air Winds (1971-2000)

GOA

SEPTEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	284	10.2	9.9	-2.4	285	8.8	8.5	-2.2	275	7.9	7.9	-0.7	243	2.2	2.0	1.0	87	9.5	-9.5	-0.5	86	22.7	-22.6	-1.6	88	27.7	-27.7	-0.9
2	281	10.2	10.0	-2.0	285	7.6	7.3	-2.0	276	6.5	6.5	-0.7	309	1.3	1.0	-0.8	87	8.3	-8.3	-0.5	89	21.5	-21.5	-0.4	92	26.5	-26.5	0.9
3	286	9.6	9.2	-2.6	283	7.9	7.7	-1.8	273	7.2	7.2	-0.4	267	2.2	2.2	0.1	92	9.5	-9.5	0.4	93	20.7	-20.7	1.1	86	25.5	-25.4	-1.6
4	288	9.4	8.9	-2.9	284	8.3	8.1	-2.0	277	7.1	7.0	-0.9	265	2.4	2.4	0.2	75	8.6	-8.3	-2.2	87	20.0	-20.0	-1.2	89	24.7	-24.7	-0.6
5	285	9.4	9.1	-2.5	279	8.1	8.0	-1.3	276	7.3	7.3	-0.8	275	2.3	2.3	-0.2	82	8.8	-8.7	-1.3	94	20.5	-20.4	1.5	85	24.1	-24.0	-2.1
6	287	7.5	7.2	-2.2	289	7.1	6.7	-2.3	277	6.2	6.1	-0.8	253	1.4	1.3	0.4	90	9.4	-9.4	0.0	92	21.2	-21.2	0.8	84	23.5	-23.4	-2.4
7	283	7.3	7.1	-1.7	289	7.8	7.4	-2.5	279	6.7	6.6	-1.0	283	1.8	1.8	-0.4	84	7.7	-7.7	-0.8	91	20.1	-20.1	0.5	90	23.8	-23.8	-0.2
8	277	7.0	7.0	-0.8	291	7.9	7.4	-2.9	287	6.3	6.0	-1.8	273	2.2	2.2	-0.1	91	8.9	-8.9	0.2	96	18.7	-18.6	2.0	94	24.6	-24.5	1.6
9	295	6.2	5.6	-2.6	299	7.2	6.3	-3.5	291	5.7	5.3	-2.0	279	0.6	0.6	-0.1	88	8.7	-8.7	-0.3	92	17.9	-17.9	0.5	93	22.6	-22.6	1.0
10	286	5.5	5.3	-1.5	299	7.4	6.5	-3.6	285	5.0	4.8	-1.3	337	0.8	0.3	-0.7	95	7.8	-7.8	0.7	93	17.0	-17.0	0.8	96	24.7	-24.6	2.4
11	289	7.7	7.3	-2.5	294	5.4	4.9	-2.2	276	3.9	3.9	-0.4	360	0.5	0.0	-0.5	84	7.1	-7.1	-0.8	89	16.3	-16.3	-0.2	92	19.5	-19.5	0.6
12	293	7.1	6.5	-2.8	300	5.8	5.0	-2.9	271	4.1	4.1	-0.1	162	0.6	-0.2	0.6	86	7.5	-7.5	-0.5	94	15.8	-15.8	1.1	89	18.5	-18.5	-0.3
13	294	7.3	6.7	-3.0	302	4.9	4.2	-2.6	276	3.0	3.0	-0.3	45	0.6	-0.4	-0.4	97	7.0	-7.0	0.8	96	15.3	-15.2	1.7	86	20.3	-20.2	-1.5
14	303	7.7	6.4	-4.2	302	4.6	3.9	-2.4	282	5.6	5.5	-1.2	297	0.7	0.6	-0.3	91	8.1	-8.1	0.1	89	16.7	-16.7	-0.3	89	19.3	-19.3	-0.4
15	301	8.2	7.1	-4.2	302	4.6	3.9	-2.4	284	4.1	4.0	-1.0	279	1.3	1.3	-0.2	88	5.6	-5.6	-0.2	103	12.0	-11.7	2.6	93	17.0	-17.0	1.0
16	302	8.1	6.9	-4.3	309	4.1	3.2	-2.6	281	2.0	2.0	-0.4	63	1.3	-1.2	-0.6	82	9.8	-9.7	-1.3	93	16.7	-16.7	1.0	96	20.1	-20.0	2.0
17	299	6.0	5.2	-2.9	304	3.4	2.8	-1.9	243	0.9	0.8	0.4	82	3.6	-3.6	-0.5	96	8.7	-8.7	0.9	87	15.1	-15.1	-0.8	94	20.6	-20.6	1.3
18	298	5.8	5.1	-2.7	311	2.9	2.2	-1.9	295	4.2	3.8	-1.8	120	1.6	-1.4	0.8	86	6.9	-6.9	-0.5	93	14.8	-14.8	0.8	95	20.9	-20.8	1.7
19	310	6.9	5.3	-4.4	322	3.1	1.9	-2.4	312	1.5	1.1	-1.0	56	0.4	-0.3	-0.2	91	7.1	-7.1	0.1	96	12.4	-12.3	1.2	95	20.0	-19.9	1.9
20	319	5.5	3.6	-4.2	321	3.2	2.0	-2.5	291	1.7	1.6	-0.6	127	1.0	-0.8	0.6	92	7.5	-7.5	0.3	99	15.1	-14.9	2.3	97	22.4	-22.2	2.8
21	299	6.0	5.2	-2.9	277	2.6	2.6	-0.3	262	1.5	1.5	0.2	124	1.8	-1.5	1.0	91	8.6	-8.6	0.1	95	14.6	-14.5	1.3	92	20.8	-20.8	0.7
22	313	5.7	4.2	-3.9	281	3.1	3.0	-0.6	335	1.7	0.7	-1.5	90	1.7	-1.7	0.0	94	7.2	-7.2	0.5	95	13.9	-13.8	1.2	98	18.3	-18.1	2.4
23	283	4.0	3.9	-0.9	294	2.7	2.5	-1.1	304	1.1	0.9	-0.6	92	2.4	-2.4	0.1	92	7.0	-7.0	0.2	97	14.4	-14.3	1.8	95	17.7	-17.6	1.6
24	287	4.5	4.3	-1.3	293	3.0	2.8	-1.2	333	0.7	0.3	-0.6	87	3.3	-3.3	-0.2	91	8.0	-8.0	0.2	97	14.1	-14.0	1.6	93	18.5	-18.5	1.0
25	284	4.9	4.7	-1.2	295	3.1	2.8	-1.3	108	0.6	-0.6	0.2	72	2.0	-1.9	-0.6	99	7.7	-7.6	1.2	99	14.1	-13.9	2.2	93	16.9	-16.9	0.9
26	288	3.9	3.7	-1.2	293	3.4	3.1	-1.3	253	1.7	1.6	0.5	150	3.2	-1.6	2.8	98	6.9	-6.8	0.9	82	12.0	-11.9	-1.6	92	19.4	-19.4	0.6
27	288	3.2	3.0	-1.0	268	3.0	3.0	0.1	259	1.0	1.0	0.2	162	1.6	-0.5	1.5	99	5.6	-5.5	0.9	86	13.1	-13.1	-1.0	89	17.7	-17.7	-0.4
28	293	3.6	3.3	-1.4	302	2.6	2.2	-1.4	311	0.9	0.7	-0.6	175	1.1	-0.1	1.1	95	5.7	-5.7	0.5	91	15.0	-15.0	0.3	87	16.4	-16.4	-0.8
29	255	2.4	2.3	0.6	295	1.7	1.5	-0.7	360	0.6	0.0	-0.6	126	2.2	-1.8	1.3	87	6.4	-6.4	-0.3	99	12.0	-11.8	1.9	93	18.4	-18.4	0.9
30	249	3.3	3.1	1.2	286	2.2	2.1	-0.6	27	0.7	-0.3	-0.6	32	1.3	-0.7	-1.1	77	5.2	-5.1	-1.2	96	13.2	-13.1	1.4	89	17.8	-17.8	-0.2

Daily Normals of Upper Air Winds (1971-2000)

106

GOA

OCTOBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	264	3.6	3.6	0.4	295	2.3	2.1	-1.0	68	1.1	-1.0	-0.4	71	2.1	-2.0	-0.7	92	5.3	-5.3	0.2	98	9.2	-9.1	1.3	93	13.6	-13.6	0.7			
2	277	3.2	3.2	-0.4	321	1.3	0.8	-1.0	54	1.9	-1.5	-1.1	51	1.4	-1.1	-0.9	87	5.7	-5.7	-0.3	100	10.1	-9.9	1.8	105	12.3	-11.9	3.1			
3	278	4.4	4.4	-0.6	283	2.7	2.6	-0.6	37	1.0	-0.6	-0.8	63	1.6	-1.4	-0.7	92	4.6	-4.6	0.2	100	10.9	-10.7	1.9	90	15.0	-15.0	-0.1			
4	266	2.9	2.9	0.2	315	1.6	1.1	-1.1	43	1.9	-1.3	-1.4	34	1.1	-0.6	-0.9	83	4.3	-4.3	-0.5	106	8.9	-8.6	2.4	89	15.2	-15.2	-0.3			
5	193	1.7	0.4	1.7	319	0.9	0.6	-0.7	328	0.9	0.5	-0.8	99	1.3	-1.3	0.2	94	5.8	-5.8	0.4	121	9.9	-8.5	5.1	101	14.7	-14.4	2.7			
6	285	1.6	1.5	-0.4	333	1.3	0.6	-1.2	279	0.6	0.6	-0.1	66	2.0	-1.8	-0.8	103	4.4	-4.3	1.0	108	10.1	-9.6	3.1	90	11.4	-11.4	0.0			
7	6	0.9	-0.1	-0.9	11	1.5	-0.3	-1.5	48	3.0	-2.2	-2.0	90	1.9	-1.9	0.0	108	3.3	-3.1	1.0	125	10.2	-8.4	5.8	96	11.5	-11.4	1.2			
8	324	2.2	1.3	-1.8	12	2.4	-0.5	-2.3	43	3.3	-2.2	-2.4	49	1.8	-1.4	-1.2	103	3.7	-3.6	0.8	102	10.0	-9.8	2.0	96	12.4	-12.3	1.3			
9	282	1.4	1.4	-0.3	7	2.4	-0.3	-2.4	39	2.8	-1.8	-2.2	40	2.5	-1.6	-1.9	109	4.6	-4.3	1.5	117	7.0	-6.2	3.2	92	12.8	-12.8	0.5			
10	282	2.9	2.8	-0.6	38	1.8	-1.1	-1.4	56	2.9	-2.4	-1.6	97	1.7	-1.7	0.2	121	2.6	-2.2	1.3	121	6.9	-5.9	3.6	101	6.5	-6.4	1.3			
11	261	0.6	0.6	0.1	53	2.1	-1.7	-1.3	70	3.3	-3.1	-1.1	104	2.5	-2.4	0.6	110	3.2	-3.0	1.1	112	5.9	-5.5	2.2	93	11.7	-11.7	0.7			
12	191	2.5	0.5	2.5	85	2.2	-2.2	-0.2	84	3.0	-3.0	-0.3	85	3.2	-3.2	-0.3	129	2.2	-1.7	1.4	126	5.7	-4.6	3.3	103	11.6	-11.3	2.6			
13	239	3.5	3.0	1.8	48	2.8	-2.1	-1.9	63	2.9	-2.6	-1.3	88	3.6	-3.6	-0.1	133	3.5	-2.6	2.4	138	5.2	-3.5	3.9	118	9.8	-8.6	4.6			
14	288	3.3	3.1	-1.0	10	2.3	-0.4	-2.3	63	3.4	-3.0	-1.5	41	2.0	-1.3	-1.5	121	2.3	-2.0	1.2	139	5.2	-3.4	3.9	117	7.4	-6.6	3.3			
15	303	2.0	1.7	-1.1	33	3.1	-1.7	-2.6	67	3.8	-3.5	-1.5	58	3.6	-3.0	-1.9	115	2.9	-2.6	1.2	124	9.4	-7.8	5.3	104	12.7	-12.3	3.1			
16	288	1.6	1.5	-0.5	55	1.6	-1.3	-0.9	84	3.1	-3.1	-0.3	69	3.1	-2.9	-1.1	119	2.5	-2.2	1.2	133	7.6	-5.6	5.2	107	11.0	-10.5	3.2			
17	290	2.9	2.7	-1.0	21	1.9	-0.7	-1.8	62	3.4	-3.0	-1.6	59	3.9	-3.3	-2.0	101	2.6	-2.6	0.5	128	5.8	-4.6	3.6	108	12.4	-11.8	3.8			
18	310	3.4	2.6	-2.2	18	1.9	-0.6	-1.8	41	3.0	-2.0	-2.3	63	2.2	-2.0	-1.0	88	2.6	-2.6	-0.1	136	7.1	-5.0	5.1	99	10.6	-10.5	1.7			
19	351	1.9	0.3	-1.9	52	2.3	-1.8	-1.4	67	4.0	-3.7	-1.6	73	1.7	-1.6	-0.5	117	3.5	-3.1	1.6	134	6.1	-4.4	4.2	105	8.7	-8.4	2.3			
20	353	0.8	0.1	-0.8	80	2.8	-2.8	-0.5	89	4.1	-4.1	-0.1	99	2.0	-2.0	0.3	109	2.8	-2.6	0.9	138	4.3	-2.9	3.2	106	10.7	-10.3	3.0			
21	323	2.0	1.2	-1.6	63	3.9	-3.5	-1.8	81	5.3	-5.2	-0.8	121	2.9	-2.5	1.5	159	1.4	-0.5	1.3	158	4.8	-1.8	4.5	111	9.3	-8.7	3.4			
22	169	0.5	-0.1	0.5	99	3.1	-3.1	0.5	89	4.3	-4.3	-0.1	99	1.9	-1.9	0.3	135	2.0	-1.4	1.4	174	5.4	-0.6	5.4	102	8.9	-8.7	1.8			
23	167	2.2	-0.5	2.1	104	3.7	-3.6	0.9	86	3.0	-3.0	-0.2	66	1.0	-0.9	-0.4	135	2.0	-1.4	1.4	153	6.8	-3.1	6.1	94	6.5	-6.5	0.5			
24	276	1.8	1.8	-0.2	85	2.1	-2.1	-0.2	118	1.7	-1.5	0.8	111	1.4	-1.3	0.5	159	1.7	-0.6	1.6	153	5.6	-2.5	5.0	105	5.7	-5.5	1.5			
25	342	0.6	0.2	-0.6	76	3.0	-2.9	-0.7	110	3.2	-3.0	1.1	139	2.0	-1.3	1.5	180	2.0	0.0	2.0	169	6.2	-1.2	6.1	109	9.5	-9.0	3.1			
26	281	1.0	1.0	-0.2	83	2.4	-2.4	-0.3	75	2.3	-2.2	-0.6	65	1.9	-1.7	-0.8	186	2.7	0.3	2.7	185	5.6	0.5	5.6	124	6.9	-5.7	3.8			
27	332	2.4	1.1	-2.1	84	3.8	-3.8	-0.4	68	4.3	-4.0	-1.6	88	2.5	-2.5	-0.1	201	2.6	0.9	2.4	183	7.0	0.4	7.0	143	5.3	-3.2	4.2			
28	6	0.9	-0.1	-0.9	70	4.0	-3.8	-1.4	63	4.4	-3.9	-2.0	66	2.4	-2.2	-1.0	239	5.0	4.3	2.6	211	8.8	4.5	7.6	131	5.7	-4.3	3.7			
29	349	1.0	0.2	-1.0	86	4.5	-4.5	-0.3	76	4.0	-3.9	-1.0	54	2.6	-2.1	-1.5	238	2.8	2.4	1.5	197	6.7	2.0	6.4	87	6.5	-6.5	-0.3			
30	13	2.2	-0.5	-2.1	83	3.9	-3.9	-0.5	76	4.6	-4.5	-1.1	102	1.9	-1.9	0.4	232	3.4	2.7	2.1	205	8.9	3.7	8.1	106	4.8	-4.6	1.3			
31	344	2.5	0.7	-2.4	80	3.4	-3.3	-0.6	71	4.9	-4.6	-1.6	71	2.8	-2.6	-0.9	212	3.6	1.9	3.0	195	6.8	1.8	6.6	126	5.4	-4.4	3.2			

Daily Normals of Upper Air Winds (1971-2000)

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GOA

NOVEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	17	1.4	-0.4	-1.3	76	4.5	-4.4	-1.1	77	4.6	-4.5	-1.0	56	3.6	-3.0	-2.0	198	3.2	1.0	3.0	187	7.1	0.9	7.0	106	4.4	-4.2	1.2			
2	356	1.6	0.1	-1.6	72	4.2	-4.0	-1.3	73	4.5	-4.3	-1.3	66	5.7	-5.2	-2.3	113	0.8	-0.7	0.3	166	6.1	-1.5	5.9	108	6.4	-6.1	2.0			
3	9	1.8	-0.3	-1.8	70	4.9	-4.6	-1.7	83	5.2	-5.2	-0.6	60	5.8	-5.0	-2.9	121	1.2	-1.0	0.6	190	7.2	1.3	7.1	104	7.6	-7.4	1.8			
4	31	1.7	-0.9	-1.5	74	4.6	-4.4	-1.3	82	4.8	-4.7	-0.7	62	6.0	-5.3	-2.8	221	1.1	0.7	0.8	171	6.9	-1.1	6.8	113	5.9	-5.4	2.3			
5	27	1.8	-0.8	-1.6	76	4.9	-4.8	-1.2	73	6.3	-6.0	-1.8	54	4.9	-4.0	-2.9	279	1.2	1.2	-0.2	182	7.0	0.2	7.0	120	5.4	-4.7	2.7			
6	53	2.0	-1.6	-1.2	78	5.3	-5.2	-1.1	76	4.4	-4.3	-1.1	73	5.5	-5.3	-1.6	305	1.6	1.3	-0.9	184	7.8	0.5	7.8	131	8.5	-6.4	5.6			
7	51	2.6	-2.0	-1.6	77	4.6	-4.5	-1.0	81	4.9	-4.8	-0.8	100	3.5	-3.4	0.6	252	0.9	0.9	0.3	174	5.5	-0.6	5.5	122	3.2	-2.7	1.7			
8	47	2.2	-1.6	-1.5	83	3.9	-3.9	-0.5	86	4.3	-4.3	-0.3	81	3.2	-3.2	-0.5	217	2.1	1.3	1.7	186	7.6	0.8	7.6	77	5.1	-5.0	-1.2			
9	59	2.3	-2.0	-1.2	70	4.7	-4.4	-1.6	77	5.0	-4.9	-1.1	71	2.1	-2.0	-0.7	247	2.1	1.9	0.8	200	6.8	2.3	6.4	81	5.3	-5.2	-0.8			
10	99	1.8	-1.8	0.3	81	3.7	-3.7	-0.6	109	3.6	-3.4	1.2	79	2.1	-2.1	-0.4	172	1.5	-0.2	1.5	208	6.9	3.2	6.1	104	4.5	-4.4	1.1			
11	69	1.7	-1.6	-0.6	69	3.0	-2.8	-1.1	85	5.3	-5.3	-0.5	45	4.5	-3.2	-3.2	259	2.6	2.6	0.5	205	5.4	2.3	4.9	130	4.2	-3.2	2.7			
12	351	0.6	0.1	-0.6	69	4.2	-3.9	-1.5	69	4.7	-4.4	-1.7	53	3.5	-2.8	-2.1	263	3.4	3.4	0.4	224	6.4	4.5	4.6	116	2.8	-2.5	1.2			
13	47	1.6	-1.2	-1.1	81	6.7	-6.6	-1.0	70	5.4	-5.1	-1.9	66	5.8	-5.3	-2.4	254	2.6	2.5	0.7	210	6.1	3.1	5.3	132	3.9	-2.9	2.6			
14	30	1.6	-0.8	-1.4	89	5.1	-5.1	-0.1	84	5.3	-5.3	-0.6	86	3.0	-3.0	-0.2	228	2.5	1.9	1.7	199	7.1	2.3	6.7	107	5.2	-5.0	1.5			
15	40	2.5	-1.6	-1.9	86	4.7	-4.7	-0.3	75	5.6	-5.4	-1.4	92	3.7	-3.7	0.1	219	2.7	1.7	2.1	198	7.4	2.3	7.0	119	1.8	-1.6	0.9			
16	81	2.0	-2.0	-0.3	78	5.3	-5.2	-1.1	81	5.8	-5.7	-0.9	98	2.7	-2.7	0.4	228	4.7	3.5	3.1	194	8.7	2.1	8.4	105	1.6	-1.5	0.4			
17	119	2.1	-1.8	1.0	93	5.3	-5.3	0.3	77	3.6	-3.5	-0.8	93	3.3	-3.3	0.2	231	6.0	4.7	3.8	195	9.9	2.5	9.6	122	4.0	-3.4	2.1			
18	90	0.8	-0.8	0.0	77	4.0	-3.9	-0.9	87	3.9	-3.9	-0.2	15	1.6	-0.4	-1.5	252	6.8	6.5	2.1	236	9.4	7.8	5.3	183	2.1	0.1	2.1			
19	59	1.2	-1.0	-0.6	78	4.8	-4.7	-1.0	67	3.6	-3.3	-1.4	2	2.3	-0.1	-2.3	252	7.7	7.3	2.4	230	10.6	8.1	6.8	178	2.6	-0.1	2.6			
20	17	1.0	-0.3	-1.0	83	4.9	-4.9	-0.6	69	4.5	-4.2	-1.6	106	1.5	-1.4	0.4	230	8.0	6.1	5.2	211	12.9	6.6	11.1	149	3.1	-1.6	2.7			
21	63	3.0	-2.7	-1.4	80	5.3	-5.2	-0.9	68	5.1	-4.7	-1.9	54	0.9	-0.7	-0.5	247	6.2	5.7	2.4	232	13.7	10.7	8.5	186	3.0	0.3	3.0			
22	71	3.7	-3.5	-1.2	82	4.4	-4.4	-0.6	70	3.7	-3.5	-1.3	336	1.2	0.5	-1.1	267	7.4	7.4	0.4	230	9.9	7.5	6.4	171	2.6	-0.4	2.6			
23	72	4.1	-3.9	-1.3	74	3.5	-3.4	-1.0	82	3.5	-3.5	-0.5	47	2.2	-1.6	-1.5	273	5.5	5.5	-0.3	222	11.3	7.6	8.3	279	3.0	3.0	-0.5			
24	68	2.9	-2.7	-1.1	70	4.6	-4.3	-1.6	75	4.3	-4.2	-1.1	3	2.2	-0.1	-2.2	277	6.6	6.6	-0.8	208	12.5	5.9	11.0	246	2.2	2.0	0.9			
25	65	2.3	-2.1	-1.0	74	4.3	-4.1	-1.2	67	4.6	-4.2	-1.8	58	3.2	-2.7	-1.7	274	5.4	5.4	-0.4	237	9.5	8.0	5.2	212	2.2	1.2	1.9			
26	112	1.1	-1.0	0.4	86	4.7	-4.7	-0.3	92	3.2	-3.2	0.1	63	0.9	-0.8	-0.4	271	6.1	6.1	-0.1	226	8.0	5.7	5.6	112	5.7	-5.3	2.1			
27	33	1.7	-0.9	-1.4	78	4.5	-4.4	-0.9	60	3.2	-2.8	-1.6	306	0.9	0.7	-0.5	249	5.7	5.3	2.0	217	12.8	7.7	10.2	30	2.0	-1.0	-1.7			
28	67	1.5	-1.4	-0.6	85	4.5	-4.5	-0.4	81	3.8	-3.8	-0.6	355	1.1	0.1	-1.1	242	8.2	7.2	3.9	230	10.4	7.9	6.7	283	2.8	2.7	-0.6			
29	27	1.6	-0.7	-1.4	84	4.4	-4.4	-0.5	44	2.8	-1.9	-2.0	289	2.8	2.6	-0.9	263	9.9	9.8	1.2	236	15.7	13.1	8.7	245	4.2	3.8	1.8			
30	51	1.3	-1.0	-0.8	79	4.8	-4.7	-0.9	62	3.2	-2.8	-1.5	25	1.4	-0.6	-1.3	251	8.6	8.1	2.8	226	12.6	9.1	8.7	200	2.7	0.9	2.5			

Daily Normals of Upper Air Winds (1971-2000)

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GOA

DECEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	55	1.9	-1.6	-1.1	72	4.7	-4.5	-1.5	81	4.0	-4.0	-0.6	90	1.5	-1.5	0.0	246	7.6	6.9	3.1	231	12.6	9.8	7.9	243	1.8	1.6	0.8			
2	74	2.9	-2.8	-0.8	72	6.0	-5.7	-1.8	82	4.2	-4.2	-0.6	86	1.4	-1.4	-0.1	236	7.3	6.0	4.1	236	12.4	10.3	6.9	238	4.5	3.8	2.4			
3	81	2.4	-2.4	-0.4	72	6.2	-5.9	-1.9	85	3.5	-3.5	-0.3	47	1.6	-1.2	-1.1	266	7.9	7.9	0.6	228	13.7	10.1	9.2	239	4.1	3.5	2.1			
4	67	1.5	-1.4	-0.6	73	5.6	-5.4	-1.6	75	4.6	-4.4	-1.2	50	3.0	-2.3	-1.9	234	5.2	4.2	3.1	200	10.1	3.5	9.5	202	2.9	1.1	2.7			
5	68	2.2	-2.0	-0.8	74	5.3	-5.1	-1.5	69	3.4	-3.2	-1.2	51	1.4	-1.1	-0.9	253	8.7	8.3	2.5	225	11.5	8.1	8.2	249	2.6	2.4	0.9			
6	81	2.0	-2.0	-0.3	77	6.5	-6.3	-1.5	51	3.8	-3.0	-2.4	339	0.9	0.3	-0.8	237	6.9	5.8	3.7	233	12.4	9.9	7.5	145	1.2	-0.7	1.0			
7	61	2.3	-2.0	-1.1	69	4.9	-4.6	-1.8	60	4.3	-3.7	-2.1	97	1.7	-1.7	0.2	259	8.1	7.9	1.6	230	12.6	9.7	8.1	178	3.1	-0.1	3.1			
8	66	3.7	-3.4	-1.5	74	5.8	-5.6	-1.6	66	3.9	-3.6	-1.6	297	0.4	0.4	-0.2	256	9.1	8.8	2.2	228	12.6	9.3	8.5	232	3.1	2.4	1.9			
9	69	3.0	-2.8	-1.1	74	4.7	-4.5	-1.3	90	2.6	-2.6	0.0	284	0.8	0.8	-0.2	263	9.9	9.8	1.2	229	14.5	10.9	9.5	197	5.2	1.5	5.0			
10	76	2.5	-2.4	-0.6	86	5.2	-5.2	-0.4	76	2.9	-2.8	-0.7	300	0.8	0.7	-0.4	248	8.4	7.8	3.2	239	12.8	11.0	6.5	271	3.9	3.9	-0.1			
11	68	3.8	-3.5	-1.4	88	5.1	-5.1	-0.2	88	3.5	-3.5	-0.1	98	0.7	-0.7	0.1	239	9.4	8.0	4.9	234	16.0	12.9	9.4	255	8.3	8.0	2.1			
12	100	2.9	-2.9	0.5	93	5.4	-5.4	0.3	81	3.1	-3.1	-0.5	113	0.8	-0.7	0.3	245	10.6	9.6	4.5	237	16.1	13.5	8.8	180	2.0	0.0	2.0			
13	75	3.5	-3.4	-0.9	88	4.8	-4.8	-0.2	94	2.6	-2.6	0.2	215	1.2	0.7	1.0	251	9.8	9.3	3.2	243	15.0	13.4	6.7	281	3.1	3.0	-0.6			
14	74	2.2	-2.1	-0.6	80	4.7	-4.6	-0.8	82	3.0	-3.0	-0.4	252	2.9	2.8	0.9	259	10.7	10.5	2.0	247	17.2	15.8	6.8	260	3.4	3.3	0.6			
15	72	2.5	-2.4	-0.8	82	5.8	-5.7	-0.8	60	2.4	-2.1	-1.2	283	0.9	0.9	-0.2	266	10.4	10.4	0.8	256	16.1	15.6	3.9	270	3.9	3.9	0.0			
16	75	3.0	-2.9	-0.8	85	4.8	-4.8	-0.4	87	3.3	-3.3	-0.2	265	2.1	2.1	0.2	268	11.8	11.8	0.4	253	15.9	15.2	4.7	247	8.3	7.6	3.3			
17	61	2.3	-2.0	-1.1	90	5.4	-5.4	0.0	93	3.8	-3.8	0.2	274	1.4	1.4	-0.1	268	14.3	14.3	0.6	252	18.7	17.8	5.8	269	4.6	4.6	0.1			
18	66	2.2	-2.0	-0.9	81	5.4	-5.3	-0.8	60	2.8	-2.4	-1.4	315	2.1	1.5	-1.5	280	12.8	12.6	-2.3	239	17.7	15.2	9.0	280	5.4	5.3	-0.9			
19	73	2.4	-2.3	-0.7	81	6.0	-5.9	-0.9	65	3.5	-3.2	-1.5	288	2.3	2.2	-0.7	272	9.8	9.8	-0.4	257	17.2	16.7	4.0	264	7.2	7.2	0.7			
20	69	3.3	-3.1	-1.2	79	6.5	-6.4	-1.2	69	4.4	-4.1	-1.6	342	2.8	0.9	-2.7	274	10.8	10.8	-0.8	253	14.4	13.7	4.3	229	4.6	3.5	3.0			
21	64	3.2	-2.9	-1.4	82	6.2	-6.1	-0.9	79	4.8	-4.7	-0.9	270	1.5	1.5	0.0	262	11.9	11.8	1.7	241	10.9	9.5	5.3	227	5.1	3.7	3.5			
22	67	3.0	-2.8	-1.2	86	5.7	-5.7	-0.4	81	2.4	-2.4	-0.4	286	2.2	2.1	-0.6	273	10.9	10.9	-0.6	255	17.0	16.4	4.4	231	2.6	2.0	1.6			
23	70	2.3	-2.2	-0.8	80	5.4	-5.3	-0.9	51	1.9	-1.5	-1.2	289	2.8	2.6	-0.9	256	12.5	12.1	3.0	256	17.9	17.3	4.4	253	3.7	3.5	1.1			
24	65	2.3	-2.1	-1.0	76	4.1	-4.0	-1.0	54	1.9	-1.5	-1.1	279	3.8	3.8	-0.6	267	13.9	13.9	0.8	259	18.8	18.4	3.7	262	7.6	7.5	1.0			
25	69	3.4	-3.2	-1.2	76	5.0	-4.9	-1.2	55	2.1	-1.7	-1.2	270	3.8	3.8	0.0	254	16.5	15.8	4.6	261	19.4	19.2	2.9	260	8.2	8.1	1.5			
26	63	2.0	-1.8	-0.9	79	5.2	-5.1	-1.0	60	2.2	-1.9	-1.1	246	4.6	4.2	1.9	261	15.7	15.5	2.5	250	16.6	15.6	5.8	269	4.7	4.7	0.1			
27	90	2.1	-2.1	0.0	85	4.9	-4.9	-0.4	72	2.0	-1.9	-0.6	258	3.0	2.9	0.6	255	11.8	11.4	3.1	246	14.7	13.5	5.9	254	4.5	4.3	1.2			
28	65	2.6	-2.4	-1.1	60	4.8	-4.2	-2.4	79	1.6	-1.6	-0.3	274	1.4	1.4	-0.1	254	11.5	11.0	3.2	248	16.0	14.8	6.1	254	2.5	2.4	0.7			
29	102	2.5	-2.4	0.5	82	5.8	-5.7	-0.8	28	1.5	-0.7	-1.3	277	3.5	3.5	-0.4	256	14.3	13.9	3.5	255	16.4	15.9	4.2	246	7.1	6.5	2.9			
30	79	0.5	-0.5	-0.1	79	4.9	-4.8	-0.9	52	1.8	-1.4	-1.1	282	4.0	3.9	-0.8	259	13.4	13.2	2.5	242	18.2	16.1	8.5	258	1.9	1.9	0.4			
31	95	1.1	-1.1	0.1	86	4.4	-4.4	-0.3	78	1.9	-1.9	-0.4	293	4.0	3.7	-1.6	259	12.1	11.9	2.4	245	16.4	14.9	6.8	264	4.7	4.7	0.5			

Daily Normals of Upper Air Winds (1971-2000)

109

GORAKHPUR

JANUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	285	2.3	2.2	-0.6	292	3.2	3.0	-1.2	291	11.0	10.3	-4.0	275	22.5	22.4	-2.1	269	33.2	33.2	0.4	265	35.9	35.8	3.2	263	33.8	33.5	4.2			
2	294	2.7	2.5	-1.1	275	3.6	3.6	-0.3	286	8.9	8.5	-2.5	280	19.9	19.6	-3.3	260	33.0	32.5	5.9	262	39.9	39.5	5.9	256	43.2	41.9	10.6			
3	303	1.7	1.4	-0.9	284	4.2	4.1	-1.0	289	9.0	8.5	-2.9	284	19.4	18.8	-4.8	281	35.9	35.2	-7.1	270	38.9	38.9	0.3	262	36.2	35.9	5.0			
4	274	2.6	2.6	-0.2	275	2.2	2.2	-0.2	292	8.0	7.4	-3.0	272	21.2	21.2	-0.8	261	34.2	33.7	5.6	258	42.0	41.1	8.8	271	40.5	40.5	-0.9			
5	285	2.8	2.7	-0.7	285	2.3	2.2	-0.6	282	7.2	7.0	-1.5	271	19.8	19.8	-0.5	264	36.7	36.5	3.6	257	42.5	41.4	9.7	258	34.0	33.3	7.1			
6	312	1.2	0.9	-0.8	301	3.3	2.8	-1.7	285	9.2	8.9	-2.4	274	19.1	19.1	-1.3	258	36.9	36.1	7.6	254	43.4	41.8	11.8	268	30.0	30.0	1.0			
7	297	1.8	1.6	-0.8	283	3.6	3.5	-0.8	288	8.9	8.4	-2.8	275	22.0	21.9	-1.9	264	33.9	33.7	3.4	277	35.9	35.6	-4.3	226	61.0	43.9	42.4			
8	331	1.0	0.5	-0.9	305	1.9	1.6	-1.1	273	9.1	9.1	-0.5	266	22.0	21.9	1.5	260	40.8	40.2	7.0	258	43.9	42.9	9.4	261	30.2	29.8	4.9			
9	297	2.8	2.5	-1.3	290	3.3	3.1	-1.1	281	8.3	8.1	-1.6	267	21.0	21.0	1.1	260	40.7	40.0	7.3	268	45.2	45.2	1.8	271	33.5	33.5	-0.7			
10	297	3.8	3.4	-1.7	288	5.6	5.3	-1.7	281	9.9	9.7	-1.8	274	20.4	20.4	-1.4	260	39.6	39.0	6.7	259	29.7	29.2	5.6	257	33.6	32.7	7.6			
11	287	2.4	2.3	-0.7	295	2.9	2.6	-1.2	277	9.4	9.3	-1.2	266	22.3	22.2	1.6	261	35.5	35.1	5.4	262	38.5	38.2	5.1	282	63.0	61.6	-13.1			
12	277	5.7	5.7	-0.7	291	5.5	5.1	-2.0	278	11.4	11.3	-1.5	269	21.4	21.4	0.2	268	36.7	36.7	1.0	268	40.9	40.9	1.2	287	61.9	59.2	-18.0			
13	284	3.6	3.5	-0.9	277	5.4	5.4	-0.7	281	10.8	10.6	-2.0	270	23.2	23.2	0.1	266	42.1	42.0	3.1	255	51.0	49.3	13.1	277	12.0	11.9	-1.5			
14	293	3.4	3.1	-1.3	289	6.0	5.7	-2.0	281	12.4	12.2	-2.4	275	26.9	26.8	-2.2	264	39.0	38.8	3.8	261	45.7	45.2	6.9	251	32.4	30.7	10.5			
15	337	1.3	0.5	-1.2	282	3.3	3.2	-0.7	267	9.9	9.9	0.5	264	22.2	22.1	2.3	264	35.9	35.7	3.8	265	47.4	47.2	4.4	253	48.3	46.3	13.9			
16	276	3.8	3.8	-0.4	282	5.1	5.0	-1.1	285	10.7	10.3	-2.8	275	20.4	20.3	-1.9	272	38.7	38.7	-1.5	283	41.5	40.5	-9.2	239	9.0	7.7	4.6			
17	283	4.8	4.7	-1.1	292	6.1	5.6	-2.3	283	14.2	13.8	-3.2	284	22.6	21.9	-5.5	274	40.6	40.5	-3.1	261	36.3	35.9	5.5	268	36.8	36.8	1.6			
18	284	3.6	3.5	-0.9	292	4.3	4.0	-1.6	291	11.6	10.8	-4.1	277	23.9	23.7	-2.8	274	35.4	35.3	-2.4	271	41.9	41.9	-0.8	285	23.1	22.4	-5.8			
19	275	2.5	2.5	-0.2	279	3.2	3.2	-0.5	283	11.8	11.5	-2.7	275	22.4	22.3	-2.0	273	39.3	39.2	-2.3	271	41.6	41.6	-0.5	273	41.1	41.0	-2.3			
20	277	1.6	1.6	-0.2	287	3.4	3.3	-1.0	288	11.2	10.7	-3.4	274	23.0	22.9	-1.7	269	40.9	40.9	0.6	273	52.5	52.4	-2.3	276	43.0	42.8	-4.5			
21	284	3.4	3.3	-0.8	286	4.7	4.5	-1.3	285	12.0	11.6	-3.0	280	23.5	23.2	-3.9	281	43.7	42.9	-8.3	277	37.1	36.8	-4.7	269	31.5	31.5	0.7			
22	288	5.9	5.6	-1.8	293	7.3	6.7	-2.9	290	14.0	13.1	-4.8	276	23.5	23.4	-2.6	268	36.8	36.8	1.5	259	33.6	33.0	6.4	266	32.5	32.4	2.2			
23	288	6.6	6.3	-2.1	288	7.7	7.3	-2.4	288	14.3	13.6	-4.5	275	26.6	26.5	-2.5	268	38.6	38.6	1.4	250	41.5	39.0	14.2	263	32.0	31.8	3.9			
24	285	6.5	6.3	-1.7	287	8.8	8.4	-2.5	294	13.3	12.2	-5.4	274	25.7	25.6	-1.7	267	32.9	32.9	1.7	276	36.5	36.3	-3.8	249	34.0	31.7	12.2			
25	288	6.6	6.3	-2.0	296	7.9	7.1	-3.4	292	14.7	13.6	-5.6	277	26.1	25.9	-3.3	268	33.5	33.5	1.3	272	28.4	28.4	-0.9	238	43.1	36.4	23.1			
26	283	4.6	4.5	-1.0	290	5.9	5.5	-2.0	295	12.7	11.5	-5.4	270	24.0	24.0	-0.1	264	35.7	35.5	3.9	275	39.4	39.3	-3.2	262	27.0	26.7	3.8			
27	280	2.3	2.3	-0.4	308	3.6	2.8	-2.2	295	11.5	10.4	-4.8	280	24.2	23.8	-4.2	266	40.5	40.4	2.7	249	47.7	44.5	17.2	277	46.0	45.7	-5.6			
28	285	2.4	2.3	-0.6	281	5.1	5.0	-1.0	285	13.2	12.8	-3.4	275	20.3	20.2	-1.8	265	42.5	42.3	3.6	260	57.3	56.5	9.5	266	17.0	17.0	1.2			
29	297	4.7	4.2	-2.1	293	7.1	6.5	-2.8	290	12.4	11.7	-4.2	277	25.2	25.0	-2.9	271	39.4	39.4	-0.4	266	36.9	36.8	2.8	289	4.0	3.8	-1.3			
30	268	3.7	3.7	0.1	289	4.6	4.4	-1.5	280	11.1	10.9	-2.0	280	20.4	20.1	-3.5	277	37.3	37.0	-4.5	267	36.0	35.9	2.1	271	44.0	44.0	-0.8			
31	281	2.0	2.0	-0.4	284	4.5	4.4	-1.1	284	10.8	10.5	-2.6	271	22.5	22.5	-0.2	263	37.2	36.9	4.6	272	43.2	43.2	-1.6	276	27.0	26.9	-2.8			

Daily Normals of Upper Air Winds (1971-2000)

110

GORAKHPUR

FEBRUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	333	0.4	0.2	-0.4	278	4.1	4.1	-0.6	285	9.6	9.3	-2.5	270	22.6	22.6	0.1	268	34.5	34.5	1.0	282	30.9	30.3	-6.2	273	30.0	30.0	-1.5			
2	266	1.4	1.4	0.1	288	5.2	4.9	-1.6	285	11.0	10.6	-2.9	274	21.1	21.1	-1.4	267	38.4	38.3	2.0	272	37.5	37.5	-1.0	280	39.3	38.7	-6.7			
3	278	3.4	3.4	-0.5	286	4.6	4.4	-1.3	289	9.2	8.7	-3.0	280	19.3	19.0	-3.2	276	37.6	37.4	-4.0	280	44.9	44.3	-7.6	284	34.7	33.6	-8.6			
4	258	3.8	3.7	0.8	281	5.9	5.8	-1.1	284	10.9	10.6	-2.7	279	21.0	20.7	-3.3	273	37.0	37.0	-1.7	277	44.7	44.4	-5.4	261	23.0	22.7	3.5			
5	282	4.2	4.1	-0.9	279	6.1	6.0	-1.0	289	10.6	10.0	-3.4	279	20.5	20.2	-3.2	281	34.3	33.7	-6.6	271	32.1	32.1	-0.6	262	32.3	32.0	4.5			
6	266	3.9	3.9	0.3	277	4.8	4.8	-0.6	285	9.9	9.6	-2.6	282	20.6	20.2	-4.2	269	29.4	29.4	0.3	272	42.1	42.1	-1.7	271	34.4	34.4	-0.9			
7	287	3.7	3.5	-1.1	282	4.7	4.6	-1.0	289	10.8	10.2	-3.5	275	20.2	20.1	-1.6	268	36.3	36.3	1.3	264	42.8	42.6	4.4	259	40.7	39.9	7.8			
8	256	0.8	0.8	0.2	284	4.6	4.5	-1.1	277	11.5	11.4	-1.5	272	20.1	20.1	-0.8	259	29.0	28.5	5.6	251	38.7	36.5	12.8	264	40.5	40.3	4.0			
9	306	1.7	1.4	-1.0	272	3.8	3.8	-0.1	272	8.6	8.6	-0.3	278	21.4	21.2	-2.8	263	29.3	29.1	3.5	267	35.9	35.9	1.6	272	30.4	30.4	-1.1			
10	305	2.4	2.0	-1.4	279	3.6	3.6	-0.6	281	7.6	7.5	-1.5	275	16.5	16.4	-1.5	269	25.0	25.0	0.4	271	37.7	37.7	-0.7	274	27.3	27.2	-1.8			
11	294	1.0	0.9	-0.4	287	4.2	4.0	-1.2	281	9.9	9.7	-1.8	281	24.9	24.5	-4.7	276	35.5	35.3	-4.0	271	33.7	33.7	-0.6	263	23.6	23.4	3.0			
12	270	3.9	3.9	0.0	283	5.9	5.8	-1.3	287	9.8	9.4	-2.8	280	19.9	19.6	-3.6	273	38.5	38.5	-1.7	267	38.9	38.9	1.9	277	27.6	27.4	-3.5			
13	268	5.8	5.8	0.2	279	5.5	5.4	-0.9	285	11.1	10.7	-2.8	271	20.7	20.7	-0.2	267	39.1	39.0	2.2	275	44.2	44.1	-3.5	265	27.1	27.0	2.3			
14	277	4.9	4.9	-0.6	280	6.0	5.9	-1.0	281	12.8	12.6	-2.4	272	24.5	24.5	-0.8	264	40.5	40.3	4.2	256	44.9	43.5	11.0	273	39.6	39.5	-2.1			
15	259	3.7	3.6	0.7	287	6.5	6.2	-1.9	286	12.7	12.2	-3.4	274	22.8	22.7	-1.7	271	42.3	42.3	-0.7	273	41.7	41.6	-2.3	265	30.5	30.4	2.4			
16	277	6.3	6.2	-0.8	285	7.9	7.6	-2.1	278	13.3	13.2	-1.8	268	21.3	21.3	0.7	265	41.2	41.1	3.3	281	46.0	45.1	-9.0	268	22.3	22.3	0.7			
17	264	6.3	6.3	0.7	275	6.2	6.2	-0.5	277	11.9	11.8	-1.4	273	24.6	24.6	-1.2	273	43.9	43.8	-2.2	261	67.2	66.3	10.9	249	24.0	22.4	8.6			
18	270	6.4	6.4	0.0	280	6.8	6.7	-1.2	279	11.2	11.1	-1.8	272	24.4	24.4	-0.7	258	43.3	42.3	9.2	262	49.2	48.7	7.2	256	43.9	42.6	10.6			
19	283	6.8	6.6	-1.5	282	10.1	9.9	-2.1	284	13.2	12.8	-3.3	275	22.7	22.6	-1.8	264	40.7	40.5	4.5	267	55.0	54.9	2.9	264	47.4	47.2	4.6			
20	271	5.7	5.7	-0.1	283	7.3	7.1	-1.7	283	12.5	12.2	-2.9	274	21.3	21.2	-1.5	268	41.4	41.4	1.1	262	42.4	41.9	6.2	254	20.2	19.4	5.6			
21	279	4.0	4.0	-0.6	279	6.5	6.4	-1.0	280	12.2	12.0	-2.1	273	23.7	23.7	-1.3	266	42.3	42.2	3.2	263	48.4	48.0	6.2	258	23.3	22.8	4.7			
22	283	6.6	6.4	-1.5	279	7.6	7.5	-1.2	283	11.9	11.6	-2.7	280	22.6	22.3	-3.9	267	43.3	43.2	2.5	267	45.0	44.9	2.2	267	42.9	42.8	2.4			
23	278	4.5	4.5	-0.6	280	6.1	6.0	-1.1	290	12.5	11.7	-4.3	279	20.9	20.7	-3.1	272	40.7	40.7	-1.4	269	33.6	33.6	0.4	285	41.0	39.6	-10.6			
24	288	2.3	2.2	-0.7	284	5.3	5.1	-1.3	290	12.6	11.8	-4.4	279	22.8	22.5	-3.7	279	36.4	36.0	-5.7	283	53.9	52.5	-12.3	284	18.0	17.5	-4.4			
25	291	1.7	1.6	-0.6	281	7.0	6.9	-1.3	283	12.8	12.5	-2.8	276	23.9	23.8	-2.5	266	41.7	41.6	3.1	266	38.7	38.6	2.8	273	42.2	42.1	-2.5			
26	263	4.9	4.9	0.6	273	8.5	8.5	-0.5	284	14.5	14.1	-3.4	270	21.9	21.9	0.1	265	36.2	36.0	3.3	265	44.1	44.0	3.5	257	30.7	30.0	6.7			
27	273	6.3	6.3	-0.3	288	8.0	7.6	-2.5	285	14.6	14.1	-3.7	284	24.8	24.1	-6.0	273	43.3	43.2	-2.5	260	49.6	48.9	8.4	264	38.3	38.1	3.8			
28	274	6.5	6.5	-0.5	278	7.1	7.0	-1.0	288	12.5	11.9	-3.9	283	25.8	25.2	-5.6	277	35.3	35.0	-4.6	272	41.7	41.7	-1.8	266	55.0	54.9	3.8			
29	252	2.2	2.1	0.7	327	10.8	5.9	-9.1	290	14.1	13.3	-4.8	288	27.3	25.9	-8.6	266	32.1	32.0	2.5	256	33.0	32.0	7.9	—	—	—	—			

Daily Normals of Upper Air Winds (1971-2000)

111

GORAKHPUR

MARCH

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	270	3.4	3.4	0.0	287	5.6	5.4	-1.6	286	11.6	11.2	-3.2	274	24.5	24.5	-1.5	271	34.0	34.0	-0.4	271	40.1	40.1	-0.7	286	39.7	38.1	-11.0			
2	272	5.9	5.9	-0.2	278	8.3	8.2	-1.2	282	11.7	11.5	-2.4	277	20.1	20.0	-2.4	283	32.1	31.3	-7.0	287	33.9	32.4	-10.0	279	34.0	33.6	-5.3			
3	269	5.6	5.6	0.1	273	6.3	6.3	-0.3	293	9.1	8.4	-3.5	278	15.3	15.2	-2.1	280	25.9	25.5	-4.7	267	30.8	30.7	1.8	271	33.5	33.5	-0.5			
4	277	6.9	6.9	-0.8	284	7.2	7.0	-1.7	290	13.0	12.2	-4.4	282	20.4	20.0	-4.2	271	33.6	33.6	-0.6	270	40.5	40.5	0.3	284	43.3	42.0	-10.6			
5	283	6.6	6.4	-1.5	283	7.7	7.5	-1.7	287	13.9	13.3	-4.0	284	19.6	19.0	-4.9	280	32.4	31.9	-5.8	283	35.2	34.3	-7.8	268	28.4	28.4	1.2			
6	268	6.8	6.8	0.2	276	8.5	8.5	-0.9	285	13.5	13.0	-3.5	275	21.0	20.9	-1.8	274	34.0	33.9	-2.3	267	37.6	37.6	1.7	272	30.7	30.7	-1.3			
7	269	8.0	8.0	0.2	278	9.3	9.2	-1.3	293	14.5	13.3	-5.7	280	22.7	22.4	-3.9	266	34.3	34.2	2.6	276	36.5	36.3	-4.1	265	27.7	27.6	2.4			
8	274	9.4	9.4	-0.6	279	9.2	9.1	-1.4	288	15.7	14.9	-4.8	281	22.1	21.7	-4.4	279	32.7	32.3	-5.0	272	35.1	35.1	-1.4	267	26.7	26.7	1.4			
9	269	6.6	6.6	0.1	281	8.5	8.3	-1.6	281	12.0	11.8	-2.4	283	18.6	18.1	-4.2	274	28.9	28.8	-2.2	272	30.5	30.5	-0.9	277	34.7	34.4	-4.2			
10	266	6.7	6.7	0.5	269	8.6	8.6	0.1	285	13.0	12.6	-3.3	274	21.1	21.1	-1.3	266	30.3	30.2	2.1	264	31.3	31.1	3.1	275	31.5	31.4	-2.7			
11	276	5.4	5.4	-0.6	282	8.7	8.5	-1.8	286	12.7	12.2	-3.5	274	19.0	18.9	-1.4	271	29.6	29.6	-0.7	271	32.7	32.7	-0.7	269	36.7	36.7	0.5			
12	273	5.9	5.9	-0.3	277	9.0	8.9	-1.1	282	13.7	13.4	-2.8	277	21.1	20.9	-2.7	277	35.6	35.4	-4.1	281	33.9	33.2	-6.7	273	36.0	36.0	-1.7			
13	289	5.6	5.3	-1.8	281	6.0	5.9	-1.2	285	11.0	10.6	-2.9	275	17.9	17.8	-1.6	275	31.5	31.4	-2.8	266	36.4	36.3	2.8	276	28.5	28.4	-2.8			
14	268	7.1	7.1	0.2	273	8.6	8.6	-0.4	278	12.6	12.5	-1.8	277	20.3	20.1	-2.5	272	33.3	33.3	-1.1	269	44.5	44.5	0.4	274	31.8	31.7	-2.3			
15	273	9.6	9.6	-0.5	277	9.3	9.2	-1.2	289	13.9	13.1	-4.5	283	21.9	21.3	-5.0	275	33.7	33.6	-3.1	275	40.5	40.4	-3.4	261	28.2	27.9	4.4			
16	279	10.5	10.4	-1.6	280	10.2	10.0	-1.8	284	14.3	13.9	-3.5	283	21.2	20.6	-4.9	276	33.3	33.1	-3.4	275	44.9	44.7	-3.8	278	30.5	30.2	-4.4			
17	276	10.9	10.8	-1.1	281	9.2	9.0	-1.7	285	13.4	12.9	-3.5	283	20.5	20.0	-4.5	274	32.1	32.0	-2.1	272	40.7	40.7	-1.5	292	42.7	39.6	-16.0			
18	276	7.3	7.3	-0.8	280	9.1	9.0	-1.6	283	13.8	13.5	-3.0	280	19.4	19.1	-3.4	274	35.9	35.8	-2.3	269	34.6	34.6	0.9	286	29.0	27.9	-8.0			
19	279	8.5	8.4	-1.4	276	8.1	8.0	-0.9	282	12.4	12.1	-2.5	276	22.1	22.0	-2.4	264	36.0	35.8	3.8	267	44.5	44.5	2.0	279	43.0	42.5	-6.7			
20	278	9.5	9.4	-1.3	278	9.5	9.4	-1.4	281	14.3	14.0	-2.8	285	20.2	19.5	-5.2	270	31.9	31.9	0.1	277	40.3	40.0	-5.0	286	67.0	64.4	-18.5			
21	271	6.7	6.7	-0.1	283	9.1	8.9	-2.0	290	12.4	11.7	-4.2	282	20.4	19.9	-4.4	279	35.8	35.3	-5.9	274	41.9	41.8	-3.1	275	46.9	46.7	-3.8			
22	280	6.6	6.5	-1.1	280	8.4	8.3	-1.4	281	12.5	12.3	-2.3	273	20.4	20.4	-1.0	272	30.6	30.6	-1.0	270	31.5	31.5	0.1	291	42.0	39.3	-14.9			
23	267	5.2	5.2	0.3	276	8.5	8.5	-0.9	283	13.3	13.0	-3.0	275	22.7	22.6	-1.8	272	34.4	34.4	-1.1	274	35.3	35.2	-2.4	281	21.6	21.2	-4.2			
24	276	8.0	8.0	-0.8	279	9.8	9.7	-1.6	285	12.3	11.9	-3.3	272	22.2	22.2	-0.9	277	34.1	33.9	-4.1	267	37.1	37.0	2.2	279	33.0	32.6	-5.0			
25	265	5.9	5.9	0.5	277	7.4	7.3	-0.9	277	11.5	11.4	-1.5	276	18.2	18.1	-2.0	264	30.7	30.6	3.0	252	41.0	39.1	12.4	264	24.7	24.6	2.5			
26	279	7.4	7.3	-1.1	277	7.5	7.4	-0.9	281	10.6	10.4	-2.1	280	18.4	18.1	-3.3	274	28.6	28.5	-2.2	273	29.3	29.3	-1.6	279	30.9	30.5	-4.8			
27	281	6.8	6.7	-1.3	275	7.4	7.4	-0.7	286	9.6	9.2	-2.7	293	19.3	17.7	-7.6	286	24.7	23.7	-6.8	285	36.2	35.0	-9.4	277	24.2	24.0	-2.8			
28	274	4.0	4.0	-0.3	278	4.3	4.3	-0.6	290	10.3	9.7	-3.5	282	18.3	17.9	-3.7	279	27.6	27.3	-4.1	282	37.0	36.1	-8.0	294	27.8	25.4	-11.3			
29	245	1.4	1.3	0.6	270	5.1	5.1	0.0	288	11.0	10.5	-3.4	282	18.1	17.7	-3.8	279	22.2	21.9	-3.5	276	33.4	33.2	-3.5	284	29.2	28.3	-7.2			
30	288	4.9	4.7	-1.5	272	5.8	5.8	-0.2	285	10.8	10.4	-2.8	278	18.4	18.2	-2.7	280	26.1	25.7	-4.5	272	31.2	31.2	-1.3	259	21.7	21.3	4.1			
31	290	6.6	6.2	-2.3	287	7.6	7.3	-2.2	287	11.6	11.1	-3.4	280	18.2	17.9	-3.3	271	29.9	29.9	-0.6	277	35.1	34.8	-4.2	279	38.9	38.5	-5.8			

Daily Normals of Upper Air Winds (1971-2000)

GORAKHPUR

APRIL

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	275	8.3	8.3	-0.7	279	11.8	11.7	-1.8	286	12.6	12.1	-3.5	284	18.8	18.3	-4.5	272	30.4	30.4	-1.3	280	35.1	34.6	-5.8	267	16.0	16.0	0.8			
2	276	7.1	7.1	-0.8	280	9.6	9.4	-1.7	285	13.1	12.6	-3.4	275	18.8	18.7	-1.8	263	26.7	26.5	3.3	265	34.6	34.5	2.9	275	25.4	25.3	-2.2			
3	279	5.0	4.9	-0.8	277	8.1	8.0	-1.0	283	11.0	10.7	-2.5	276	19.0	18.9	-1.9	265	30.2	30.1	2.7	262	33.7	33.4	4.6	275	21.7	21.6	-1.7			
4	288	7.8	7.4	-2.4	285	8.9	8.6	-2.3	284	11.1	10.8	-2.6	284	17.9	17.4	-4.2	265	29.6	29.5	2.4	261	31.9	31.5	4.8	259	27.2	26.7	5.3			
5	282	8.5	8.3	-1.7	273	13.3	13.3	-0.8	282	10.7	10.5	-2.2	278	18.4	18.2	-2.6	279	30.5	30.1	-5.0	268	33.9	33.9	1.4	255	29.5	28.5	7.6			
6	275	8.1	8.1	-0.7	264	8.3	8.3	0.8	281	10.9	10.7	-2.1	281	16.9	16.6	-3.1	281	26.9	26.4	-5.1	273	32.4	32.4	-1.7	263	14.7	14.6	1.8			
7	277	7.7	7.6	-1.0	278	9.0	8.9	-1.2	288	11.9	11.3	-3.6	284	19.1	18.6	-4.5	276	31.3	31.1	-3.5	276	33.1	32.9	-3.6	252	29.7	28.3	9.0			
8	285	6.3	6.1	-1.6	278	8.7	8.6	-1.2	278	13.0	12.9	-1.9	280	19.1	18.8	-3.3	273	27.4	27.4	-1.6	272	31.4	31.4	-1.1	243	30.3	27.0	13.8			
9	256	4.1	4.0	1.0	281	6.7	6.6	-1.3	282	13.1	12.8	-2.7	275	18.7	18.6	-1.5	266	27.6	27.5	1.7	255	30.1	29.0	8.0	252	17.1	16.2	5.4			
10	290	6.4	6.0	-2.2	278	8.9	8.8	-1.3	279	12.6	12.4	-2.0	281	16.0	15.7	-3.0	270	23.0	23.0	-0.2	256	27.6	26.8	6.7	262	19.8	19.6	2.6			
11	281	5.9	5.8	-1.1	278	9.4	9.3	-1.3	287	14.5	13.8	-4.3	285	17.6	17.0	-4.6	273	22.9	22.9	-1.1	265	27.7	27.6	2.5	260	23.9	23.5	4.3			
12	293	5.2	4.8	-2.0	285	8.0	7.7	-2.1	285	12.3	11.9	-3.3	280	17.5	17.2	-3.1	272	24.9	24.9	-0.8	266	26.8	26.7	2.1	269	30.4	30.4	0.5			
13	291	6.8	6.4	-2.4	281	9.0	8.8	-1.7	278	13.1	13.0	-1.9	278	19.6	19.4	-2.7	271	28.1	28.1	-0.7	273	36.6	36.6	-1.6	257	20.0	19.5	4.4			
14	272	6.3	6.3	-0.2	268	8.0	8.0	0.3	278	12.8	12.7	-1.8	285	19.0	18.4	-4.8	267	27.4	27.4	1.4	259	31.1	30.5	6.1	277	21.0	20.9	-2.4			
15	270	4.7	4.7	0.0	274	7.7	7.7	-0.5	278	12.6	12.5	-1.8	280	18.7	18.4	-3.1	270	24.9	24.9	-0.2	261	24.4	24.1	3.7	256	16.4	15.9	3.9			
16	270	5.0	5.0	0.0	273	8.5	8.5	-0.5	277	12.8	12.7	-1.5	280	17.9	17.6	-3.0	275	24.1	24.0	-2.1	262	26.5	26.3	3.5	274	29.4	29.3	-2.3			
17	276	7.1	7.1	-0.7	280	7.2	7.1	-1.2	271	9.6	9.6	-0.2	286	18.2	17.5	-5.0	281	25.0	24.5	-4.9	278	31.5	31.2	-4.5	260	20.5	20.2	3.7			
18	277	5.6	5.6	-0.7	282	7.0	6.8	-1.5	291	12.1	11.3	-4.3	285	16.4	15.9	-4.2	279	26.6	26.3	-4.2	269	28.8	28.8	0.3	267	22.5	22.5	1.1			
19	290	6.6	6.2	-2.2	273	8.3	8.3	-0.5	288	12.3	11.7	-3.7	288	15.2	14.5	-4.7	274	23.4	23.4	-1.5	268	32.0	32.0	1.2	267	18.1	18.1	1.0			
20	286	5.0	4.8	-1.4	281	6.6	6.5	-1.3	283	11.9	11.6	-2.7	289	13.9	13.1	-4.6	285	22.6	21.9	-5.7	273	24.1	24.1	-1.1	258	18.4	18.0	3.7			
21	272	3.3	3.3	-0.1	276	5.3	5.3	-0.6	290	11.9	11.2	-4.0	283	12.7	12.4	-2.9	279	20.8	20.5	-3.3	275	24.4	24.3	-2.1	258	26.9	26.3	5.6			
22	264	4.4	4.4	0.5	268	5.8	5.8	0.2	287	11.0	10.5	-3.3	284	12.4	12.0	-3.1	278	21.4	21.2	-2.8	272	26.0	26.0	-1.1	263	21.7	21.6	2.5			
23	276	5.5	5.5	-0.6	273	7.1	7.1	-0.4	277	11.4	11.3	-1.3	280	15.8	15.5	-2.8	269	20.4	20.4	0.2	267	25.4	25.4	1.3	273	18.8	18.8	-0.9			
24	286	4.7	4.5	-1.3	276	6.7	6.7	-0.7	285	12.4	12.0	-3.2	286	13.7	13.2	-3.7	277	17.9	17.8	-2.1	272	21.3	21.3	-0.8	278	16.2	16.1	-2.2			
25	310	1.7	1.3	-1.1	273	5.0	5.0	-0.3	281	9.9	9.7	-1.9	284	15.5	15.1	-3.7	280	21.2	20.9	-3.8	262	25.6	25.4	3.5	274	9.7	9.7	-0.6			
26	270	1.3	1.3	0.0	272	4.9	4.9	-0.2	278	10.8	10.7	-1.5	287	15.0	14.3	-4.5	284	19.5	18.9	-4.7	278	25.2	24.9	-3.7	266	21.8	21.7	1.5			
27	274	3.2	3.2	-0.2	282	4.3	4.2	-0.9	292	10.9	10.1	-4.0	291	13.3	12.4	-4.7	282	20.0	19.6	-4.1	275	20.1	20.0	-1.8	280	16.2	16.0	-2.7			
28	284	3.6	3.5	-0.9	281	4.1	4.0	-0.8	288	11.0	10.5	-3.4	290	15.3	14.3	-5.3	275	19.6	19.5	-1.8	264	22.4	22.3	2.4	254	15.0	14.4	4.2			
29	286	1.8	1.7	-0.5	258	3.9	3.8	0.8	288	11.8	11.2	-3.6	289	12.8	12.1	-4.2	287	17.9	17.1	-5.3	274	19.7	19.7	-1.3	284	14.5	14.1	-3.4			
30	290	1.2	1.1	-0.4	287	5.4	5.2	-1.6	292	12.7	11.8	-4.7	290	16.1	15.2	-5.4	277	21.6	21.4	-2.6	260	19.8	19.5	3.3	261	16.9	16.7	2.6			

Daily Normals of Upper Air Winds (1971-2000)

GORAKHPUR

MAY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	283	5.3	5.2	-1.2	279	5.9	5.8	-0.9	283	12.7	12.4	-2.8	287	14.5	13.9	-4.3	271	19.5	19.5	-0.4	257	21.8	21.2	5.0	256	15.3	14.9	3.6			
2	278	3.6	3.6	-0.5	279	5.1	5.0	-0.8	283	11.4	11.1	-2.6	284	13.1	12.7	-3.2	276	18.3	18.2	-1.9	257	24.2	23.6	5.3	250	15.4	14.5	5.2			
3	292	2.9	2.7	-1.1	279	6.5	6.4	-1.0	290	11.4	10.7	-3.9	283	13.0	12.6	-3.0	259	14.1	13.8	2.7	260	21.8	21.5	3.6	262	11.8	11.7	1.7			
4	274	4.5	4.5	-0.3	275	6.0	6.0	-0.5	283	10.3	10.0	-2.4	281	12.8	12.6	-2.5	270	20.8	20.8	0.1	261	26.8	26.5	4.3	253	20.9	20.0	6.0			
5	276	2.7	2.7	-0.3	279	5.1	5.0	-0.8	288	9.4	8.9	-2.9	284	12.3	12.0	-2.9	265	19.7	19.6	1.8	265	20.6	20.5	1.9	255	11.0	10.6	2.9			
6	285	3.9	3.8	-1.0	278	5.5	5.4	-0.8	286	12.3	11.8	-3.4	288	10.9	10.4	-3.3	271	18.0	18.0	-0.4	262	23.1	22.9	3.3	268	14.4	14.4	0.6			
7	250	1.2	1.1	0.4	248	2.2	2.0	0.8	281	10.5	10.3	-2.0	290	11.7	11.0	-4.1	278	14.3	14.2	-2.0	274	18.8	18.8	-1.3	254	20.1	19.4	5.4			
8	90	0.9	-0.9	0.0	278	3.5	3.5	-0.5	283	10.3	10.0	-2.3	279	12.7	12.6	-1.9	273	16.3	16.3	-0.9	264	24.9	24.8	2.4	281	14.7	14.4	-2.8			
9	282	4.2	4.1	-0.9	281	6.2	6.1	-1.2	289	10.4	9.8	-3.4	280	13.2	13.0	-2.4	266	17.6	17.6	1.2	264	24.5	24.4	2.6	272	9.6	9.6	-0.3			
10	282	3.0	2.9	-0.6	286	5.1	4.9	-1.4	276	9.7	9.6	-1.0	273	11.7	11.7	-0.6	257	21.7	21.2	4.7	250	21.9	20.6	7.4	262	10.7	10.6	1.4			
11	310	3.4	2.6	-2.2	285	4.9	4.7	-1.3	284	9.5	9.2	-2.3	282	13.3	13.0	-2.8	271	20.0	20.0	-0.4	262	21.6	21.4	3.1	262	12.0	11.9	1.6			
12	287	4.4	4.2	-1.3	286	5.7	5.5	-1.6	287	9.8	9.4	-2.8	284	13.4	13.0	-3.2	272	18.6	18.6	-0.7	266	21.0	20.9	1.5	239	7.2	6.2	3.7			
13	292	2.7	2.5	-1.0	259	2.5	2.5	0.5	284	9.1	8.8	-2.2	278	13.1	13.0	-1.8	271	17.0	17.0	-0.4	265	20.9	20.8	1.8	266	10.8	10.8	0.7			
14	305	1.9	1.6	-1.1	257	2.7	2.6	0.6	286	11.2	10.8	-3.0	286	14.2	13.7	-3.9	268	19.2	19.2	0.8	269	21.6	21.6	0.4	291	13.8	12.9	-5.0			
15	263	2.5	2.5	0.3	252	4.2	4.0	1.3	285	11.0	10.6	-2.8	282	15.0	14.7	-3.2	279	22.2	21.9	-3.4	274	21.1	21.0	-1.5	278	11.1	11.0	-1.5			
16	270	1.5	1.5	0.0	270	3.2	3.2	0.0	284	11.4	11.0	-2.8	282	13.0	12.7	-2.6	272	17.3	17.3	-0.7	257	25.2	24.5	5.7	243	7.2	6.4	3.3			
17	270	1.6	1.6	0.0	261	4.0	4.0	0.6	286	11.0	10.6	-3.1	284	12.0	11.6	-2.9	274	15.4	15.4	-1.2	257	23.2	22.6	5.1	245	6.8	6.2	2.9			
18	299	2.1	1.8	-1.0	286	3.5	3.4	-1.0	294	10.4	9.5	-4.2	292	13.8	12.8	-5.2	278	20.7	20.5	-2.7	263	24.4	24.2	3.0	261	13.3	13.1	2.1			
19	297	0.9	0.8	-0.4	270	2.1	2.1	0.0	299	10.8	9.4	-5.3	291	12.2	11.4	-4.3	268	16.3	16.3	0.7	258	23.8	23.2	5.1	246	8.7	8.0	3.5			
20	255	2.3	2.2	0.6	272	2.8	2.8	-0.1	287	9.7	9.3	-2.8	283	10.8	10.5	-2.5	261	16.9	16.7	2.5	258	18.7	18.3	3.9	243	11.9	10.6	5.4			
21	270	1.4	1.4	0.0	269	4.4	4.4	0.1	285	10.1	9.8	-2.6	289	12.0	11.3	-4.0	267	16.9	16.9	0.8	260	20.7	20.4	3.7	251	10.2	9.7	3.3			
22	225	0.8	0.6	0.6	276	4.5	4.5	-0.5	292	11.3	10.4	-4.3	285	12.3	11.9	-3.3	266	15.0	15.0	1.0	262	16.3	16.2	2.2	258	10.2	10.0	2.2			
23	277	2.6	2.6	-0.3	273	3.5	3.5	-0.2	281	9.3	9.1	-1.7	284	11.3	11.0	-2.7	256	13.5	13.1	3.3	245	17.0	15.5	7.1	232	7.9	6.2	4.9			
24	99	1.3	-1.3	0.2	274	2.7	2.7	-0.2	292	8.4	7.8	-3.1	294	11.1	10.1	-4.5	273	11.7	11.7	-0.7	254	16.6	15.9	4.6	229	6.9	5.2	4.5			
25	303	1.7	1.4	-0.9	285	3.4	3.3	-0.9	295	10.9	9.9	-4.6	297	9.7	8.6	-4.4	265	12.1	12.1	1.1	254	16.6	16.0	4.6	231	6.9	5.4	4.3			
26	60	0.8	-0.7	-0.4	284	2.9	2.8	-0.7	293	9.1	8.4	-3.6	303	11.2	9.4	-6.0	289	12.9	12.2	-4.3	265	15.5	15.4	1.4	236	4.6	3.8	2.6			
27	279	1.3	1.3	-0.2	263	2.3	2.3	0.3	289	9.7	9.2	-3.1	295	13.2	12.0	-5.5	270	17.9	17.9	0.1	260	19.3	19.0	3.2	248	9.4	8.7	3.6			
28	315	0.4	0.3	-0.3	283	5.1	5.0	-1.2	288	11.1	10.5	-3.5	290	12.8	12.0	-4.4	264	14.3	14.2	1.5	248	17.4	16.2	6.4	236	12.7	10.5	7.1			
29	277	3.2	3.2	-0.4	274	5.2	5.2	-0.4	290	12.5	11.7	-4.3	292	14.8	13.7	-5.5	261	14.8	14.6	2.3	248	14.8	13.7	5.5	235	10.5	8.6	6.0			
30	299	3.3	2.9	-1.6	290	4.1	3.9	-1.4	290	9.8	9.2	-3.3	285	11.5	11.1	-2.9	264	12.9	12.8	1.4	247	16.6	15.3	6.5	233	7.9	6.3	4.7			
31	275	3.4	3.4	-0.3	282	4.5	4.4	-0.9	286	10.4	10.0	-2.8	285	12.4	12.0	-3.3	267	13.5	13.5	0.7	255	18.0	17.4	4.7	242	5.4	4.8	2.5			

Daily Normals of Upper Air Winds (1971-2000)

GORAKHPUR

JUNE

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	272	3.2	3.2	-0.1	276	4.8	4.8	-0.5	284	11.8	11.4	-2.9	279	11.4	11.3	-1.7	260	14.4	14.2	2.4	253	15.1	14.4	4.5	218	12.4	7.7	9.7			
2	270	3.0	3.0	0.0	287	4.1	3.9	-1.2	291	11.0	10.2	-4.0	285	9.8	9.5	-2.5	260	16.8	16.5	2.9	247	16.8	15.5	6.6	213	7.7	4.2	6.4			
3	346	1.6	0.4	-1.6	297	3.8	3.4	-1.7	290	8.9	8.3	-3.1	277	9.9	9.8	-1.2	257	14.5	14.1	3.3	244	17.8	16.0	7.8	207	11.5	5.3	10.2			
4	323	1.0	0.6	-0.8	280	2.8	2.8	-0.5	295	7.2	6.5	-3.0	282	8.9	8.7	-1.9	253	17.8	17.0	5.3	241	20.4	17.8	9.9	222	12.5	8.3	9.3			
5	307	0.5	0.4	-0.3	259	2.6	2.6	0.5	289	6.5	6.1	-2.1	275	9.5	9.5	-0.9	256	17.3	16.8	4.3	240	12.8	11.1	6.3	207	7.1	3.2	6.3			
6	292	1.1	1.0	-0.4	276	2.7	2.7	-0.3	273	6.7	6.7	-0.3	284	7.2	7.0	-1.7	254	12.3	11.8	3.4	251	14.5	13.7	4.8	189	3.0	0.5	3.0			
7	23	0.8	-0.3	-0.7	291	0.9	0.8	-0.3	298	6.0	5.3	-2.8	297	6.2	5.5	-2.8	276	11.9	11.8	-1.3	255	13.0	12.5	3.4	128	2.8	-2.2	1.7			
8	—	—	—	—	270	1.8	1.8	0.0	292	7.4	6.8	-2.8	288	6.1	5.8	-1.9	282	10.0	9.8	-2.1	263	7.7	7.6	0.9	107	1.7	-1.6	0.5			
9	108	0.9	-0.9	0.3	297	0.7	0.6	-0.3	302	7.4	6.3	-3.9	280	7.3	7.2	-1.3	265	6.5	6.5	0.6	239	6.1	5.2	3.1	138	2.4	-1.6	1.8			
10	95	1.1	-1.1	0.1	257	1.3	1.3	0.3	299	8.0	7.0	-3.9	291	6.6	6.2	-2.4	273	8.8	8.8	-0.5	263	6.0	6.0	0.7	165	2.3	-0.6	2.2			
11	99	1.3	-1.3	0.2	360	0.9	0.0	-0.9	293	6.7	6.2	-2.6	291	5.9	5.5	-2.1	272	6.8	6.8	-0.2	247	7.8	7.2	3.0	115	2.6	-2.4	1.1			
12	128	2.3	-1.8	1.4	247	1.3	1.2	0.5	292	6.1	5.7	-2.3	285	5.4	5.2	-1.4	265	7.4	7.4	0.7	245	8.1	7.4	3.4	139	2.3	-1.5	1.7			
13	92	2.5	-2.5	0.1	284	1.6	1.6	-0.4	308	5.4	4.3	-3.3	293	7.2	6.6	-2.8	271	6.0	6.0	-0.1	249	7.8	7.3	2.8	142	4.2	-2.6	3.3			
14	73	3.1	-3.0	-0.9	300	0.8	0.7	-0.4	290	5.9	5.5	-2.0	275	6.2	6.2	-0.5	258	5.5	5.4	1.1	244	5.8	5.2	2.5	119	7.5	-6.6	3.6			
15	63	1.6	-1.4	-0.7	297	0.9	0.8	-0.4	301	4.5	3.9	-2.3	293	6.3	5.8	-2.5	265	4.4	4.4	0.4	229	3.2	2.4	2.1	100	1.7	-1.7	0.3			
16	85	2.5	-2.5	-0.2	284	0.4	0.4	-0.1	287	4.9	4.7	-1.4	283	4.5	4.4	-1.0	255	4.6	4.4	1.2	230	3.0	2.3	1.9	81	4.4	-4.3	-0.7			
17	109	2.1	-2.0	0.7	190	1.1	0.2	1.1	294	2.0	1.8	-0.8	274	4.4	4.4	-0.3	263	6.1	6.1	0.7	213	4.9	2.7	4.1	76	2.1	-2.0	-0.5			
18	94	2.9	-2.9	0.2	270	0.2	0.2	0.0	297	3.7	3.3	-1.7	287	5.4	5.2	-1.6	240	3.9	3.4	2.0	209	5.3	2.6	4.6	109	6.7	-6.3	2.2			
19	73	3.0	-2.9	-0.9	270	0.8	0.8	0.0	288	2.9	2.8	-0.9	270	2.2	2.2	0.0	239	4.2	3.6	2.2	200	4.9	1.7	4.6	109	6.2	-5.9	2.0			
20	72	2.3	-2.2	-0.7	243	0.9	0.8	0.4	287	2.8	2.7	-0.8	278	1.4	1.4	-0.2	239	3.9	3.3	2.0	189	2.0	0.3	2.0	98	5.6	-5.5	0.8			
21	130	0.8	-0.6	0.5	135	0.6	-0.4	0.4	326	2.3	1.3	-1.9	330	2.2	1.1	-1.9	245	2.1	1.9	0.9	167	1.7	-0.4	1.7	95	4.5	-4.5	0.4			
22	72	2.6	-2.5	-0.8	70	2.0	-1.9	-0.7	13	1.7	-0.4	-1.7	169	0.5	-0.1	0.5	201	2.2	0.8	2.1	168	5.0	-1.0	4.9	92	5.3	-5.3	0.2			
23	90	1.7	-1.7	0.0	63	0.4	-0.4	-0.2	332	1.7	0.8	-1.5	284	0.4	0.4	-0.1	249	1.9	1.8	0.7	215	2.4	1.4	2.0	78	5.8	-5.7	-1.2			
24	338	1.1	0.4	-1.0	243	0.7	0.6	0.3	274	2.7	2.7	-0.2	304	1.8	1.5	-1.0	214	3.6	2.0	3.0	171	2.4	-0.4	2.4	99	8.7	-8.6	1.3			
25	120	2.4	-2.1	1.2	153	0.4	-0.2	0.4	287	2.4	2.3	-0.7	313	2.2	1.6	-1.5	104	0.4	-0.4	0.1	148	3.9	-2.1	3.3	138	5.5	-3.7	4.1			
26	94	3.0	-3.0	0.2	92	2.3	-2.3	0.1	336	1.0	0.4	-0.9	309	0.6	0.5	-0.4	146	1.4	-0.8	1.2	161	3.7	-1.2	3.5	97	4.8	-4.8	0.6			
27	94	4.0	-4.0	0.3	104	2.9	-2.8	0.7	323	0.5	0.3	-0.4	14	0.8	-0.2	-0.8	195	3.1	0.8	3.0	147	3.0	-1.6	2.5	86	9.5	-9.5	-0.7			
28	98	3.4	-3.4	0.5	90	2.4	-2.4	0.0	346	1.2	0.3	-1.2	254	0.7	0.7	0.2	193	3.2	0.7	3.1	135	3.5	-2.5	2.5	96	8.5	-8.5	0.9			
29	87	1.8	-1.8	-0.1	69	1.7	-1.6	-0.6	57	1.7	-1.4	-0.9	298	3.8	3.4	-1.8	79	0.5	-0.5	-0.1	118	2.4	-2.1	1.1	89	6.1	-6.1	-0.1			
30	27	0.2	-0.1	-0.2	255	1.1	1.1	0.3	306	2.7	2.2	-1.6	279	1.3	1.3	-0.2	238	1.3	1.1	0.7	158	3.2	-1.2	3.0	83	6.7	-6.7	-0.8			

Daily Normals of Upper Air Winds (1971-2000)

GORAKHPUR

JULY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	288	0.9	0.9	-0.3	274	3.9	3.9	-0.3	299	4.8	4.2	-2.3	293	2.3	2.1	-0.9	234	0.9	0.7	0.5	86	2.6	-2.6	-0.2	87	9.4	-9.4	-0.5			
2	124	0.7	-0.6	0.4	45	1.3	-0.9	-0.9	307	2.5	2.0	-1.5	257	0.9	0.9	0.2	197	2.7	0.8	2.6	137	4.0	-2.7	2.9	77	12.5	-12.2	-2.9			
3	99	1.2	-1.2	0.2	290	1.2	1.1	-0.4	283	2.2	2.1	-0.5	322	1.6	1.0	-1.3	264	1.0	1.0	0.1	110	2.3	-2.2	0.8	82	8.8	-8.7	-1.3			
4	99	3.2	-3.2	0.5	313	1.8	1.3	-1.2	292	5.8	5.4	-2.2	325	3.5	2.0	-2.9	75	2.0	-1.9	-0.5	83	3.1	-3.1	-0.4	74	11.2	-10.8	-3.1			
5	146	0.4	-0.2	0.3	288	3.2	3.0	-1.0	283	5.5	5.4	-1.2	317	3.4	2.3	-2.5	135	0.7	-0.5	0.5	98	3.6	-3.6	0.5	77	12.5	-12.2	-2.8			
6	113	2.5	-2.3	1.0	72	0.3	-0.3	-0.1	300	3.6	3.1	-1.8	309	1.4	1.1	-0.9	193	1.8	0.4	1.8	126	3.2	-2.6	1.9	92	13.4	-13.4	0.5			
7	102	3.5	-3.4	0.7	135	0.1	-0.1	0.1	291	1.4	1.3	-0.5	111	0.9	-0.8	0.3	141	2.2	-1.4	1.7	100	3.9	-3.8	0.7	84	11.2	-11.1	-1.1			
8	115	1.4	-1.3	0.6	150	1.6	-0.8	1.4	247	2.5	2.3	1.0	210	2.0	1.0	1.7	105	3.0	-2.9	0.8	104	5.0	-4.9	1.2	68	12.4	-11.5	-4.7			
9	120	0.8	-0.7	0.4	132	1.2	-0.9	0.8	76	0.8	-0.8	-0.2	98	0.7	-0.7	0.1	94	3.2	-3.2	0.2	86	6.4	-6.4	-0.4	82	10.7	-10.6	-1.5			
10	92	3.3	-3.3	0.1	131	1.8	-1.4	1.2	171	1.2	-0.2	1.2	124	0.7	-0.6	0.4	101	1.0	-1.0	0.2	126	4.6	-3.7	2.7	72	10.6	-10.1	-3.3			
11	97	4.6	-4.6	0.6	106	4.1	-3.9	1.1	116	3.0	-2.7	1.3	124	2.5	-2.1	1.4	156	2.2	-0.9	2.0	106	3.7	-3.6	1.0	72	13.1	-12.5	-4.0			
12	106	4.4	-4.2	1.2	109	4.3	-4.1	1.4	117	4.2	-3.8	1.9	80	2.9	-2.9	-0.5	87	3.4	-3.4	-0.2	90	5.3	-5.3	0.0	79	11.4	-11.2	-2.1			
13	104	2.5	-2.4	0.6	97	2.6	-2.6	0.3	125	2.4	-2.0	1.4	127	3.0	-2.4	1.8	104	1.6	-1.6	0.4	89	4.6	-4.6	-0.1	68	15.1	-14.0	-5.7			
14	101	4.1	-4.0	0.8	115	4.0	-3.6	1.7	116	3.2	-2.9	1.4	125	2.1	-1.7	1.2	93	4.1	-4.1	0.2	99	4.3	-4.2	0.7	79	13.9	-13.7	-2.6			
15	101	4.4	-4.3	0.8	105	3.9	-3.8	1.0	112	3.8	-3.5	1.4	147	1.7	-0.9	1.4	77	2.6	-2.5	-0.6	64	6.9	-6.2	-3.0	77	12.5	-12.2	-2.9			
16	93	3.7	-3.7	0.2	129	2.2	-1.7	1.4	132	1.5	-1.1	1.0	94	1.6	-1.6	0.1	65	5.4	-4.9	-2.3	93	7.0	-7.0	0.4	83	16.3	-16.2	-1.9			
17	108	2.5	-2.4	0.8	96	2.7	-2.7	0.3	127	1.0	-0.8	0.6	92	3.2	-3.2	0.1	97	4.3	-4.3	0.5	77	6.8	-6.6	-1.5	72	14.9	-14.1	-4.7			
18	88	3.5	-3.5	-0.1	108	4.5	-4.3	1.4	123	3.3	-2.8	1.8	72	0.9	-0.9	-0.3	51	3.5	-2.7	-2.2	68	7.3	-6.8	-2.7	73	14.2	-13.6	-4.1			
19	99	4.3	-4.2	0.7	104	6.0	-5.8	1.4	106	5.0	-4.8	1.4	95	6.3	-6.3	0.5	62	2.4	-2.1	-1.1	49	10.0	-7.6	-6.5	80	13.1	-12.9	-2.3			
20	110	3.3	-3.1	1.1	107	4.9	-4.7	1.4	107	3.4	-3.3	1.0	70	2.9	-2.7	-1.0	70	4.7	-4.4	-1.6	73	8.7	-8.3	-2.5	86	13.3	-13.3	-0.9			
21	119	2.3	-2.0	1.1	114	5.7	-5.2	2.3	118	5.1	-4.5	2.4	99	4.4	-4.3	0.7	66	5.4	-4.9	-2.2	79	7.6	-7.5	-1.5	86	14.7	-14.7	-1.1			
22	121	0.6	-0.5	0.3	109	4.6	-4.4	1.5	108	6.1	-5.8	1.9	91	4.2	-4.2	0.1	83	5.1	-5.1	-0.6	86	7.7	-7.7	-0.5	84	13.8	-13.7	-1.4			
23	99	1.2	-1.2	0.2	108	4.0	-3.8	1.2	102	4.7	-4.6	1.0	90	5.2	-5.2	0.0	85	5.5	-5.5	-0.5	82	8.6	-8.5	-1.2	83	15.5	-15.4	-1.8			
24	118	1.7	-1.5	0.8	133	3.5	-2.6	2.4	114	4.2	-3.8	1.7	123	3.3	-2.8	1.8	106	6.6	-6.4	1.8	76	8.8	-8.5	-2.1	76	15.3	-14.8	-3.7			
25	138	1.5	-1.0	1.1	119	2.3	-2.0	1.1	130	3.3	-2.5	2.1	117	3.5	-3.1	1.6	95	6.2	-6.2	0.5	91	8.7	-8.7	0.2	91	14.1	-14.1	0.2			
26	99	3.9	-3.9	0.6	122	3.1	-2.6	1.6	126	2.2	-1.8	1.3	45	1.4	-1.0	-1.0	73	4.8	-4.6	-1.4	101	7.7	-7.6	1.5	84	13.2	-13.1	-1.4			
27	124	2.3	-1.9	1.3	147	2.4	-1.3	2.0	116	2.8	-2.5	1.2	97	3.9	-3.9	0.5	85	5.5	-5.5	-0.5	74	7.4	-7.1	-2.1	76	15.4	-14.9	-3.7			
28	69	1.9	-1.8	-0.7	95	2.5	-2.5	0.2	105	3.4	-3.3	0.9	102	5.1	-5.0	1.1	88	7.0	-7.0	-0.3	79	9.8	-9.6	-1.9	78	21.8	-21.4	-4.4			
29	111	6.4	-6.0	2.3	119	4.5	-3.9	2.2	119	4.3	-3.8	2.1	100	6.6	-6.5	1.2	94	8.0	-8.0	0.6	87	10.9	-10.9	-0.6	86	16.4	-16.4	-1.1			
30	120	2.8	-2.4	1.4	133	2.3	-1.7	1.6	122	3.1	-2.6	1.6	95	3.3	-3.3	0.3	74	4.1	-3.9	-1.1	79	7.1	-7.0	-1.4	71	10.5	-9.9	-3.5			
31	88	3.8	-3.8	-0.1	118	2.4	-2.1	1.1	105	1.6	-1.5	0.4	85	3.7	-3.7	-0.3	81	6.2	-6.1	-1.0	60	6.7	-5.8	-3.4	68	15.1	-14.0	-5.6			

Daily Normals of Upper Air Winds (1971-2000)

GORAKHPUR

AUGUST

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	94	1.4	-1.4	0.1	96	0.9	-0.9	0.1	180	0.8	0.0	0.8	63	2.0	-1.8	-0.9	53	5.5	-4.4	-3.3	83	7.0	-6.9	-0.9	63	12.5	-11.2	-5.6			
2	125	3.2	-2.6	1.8	152	1.7	-0.8	1.5	131	0.9	-0.7	0.6	30	1.6	-0.8	-1.4	45	3.1	-2.2	-2.2	42	4.7	-3.1	-3.5	72	13.0	-12.3	-4.1			
3	114	3.2	-2.9	1.3	111	3.6	-3.4	1.3	107	2.7	-2.6	0.8	82	3.5	-3.5	-0.5	93	3.6	-3.6	0.2	70	3.7	-3.5	-1.3	83	10.9	-10.8	-1.4			
4	96	2.7	-2.7	0.3	114	3.5	-3.2	1.4	90	3.8	-3.8	0.0	83	5.1	-5.1	-0.6	83	5.2	-5.2	-0.6	63	7.4	-6.6	-3.4	82	13.6	-13.5	-2.0			
5	118	2.7	-2.4	1.3	121	3.7	-3.2	1.9	121	3.1	-2.7	1.6	90	5.3	-5.3	0.0	74	7.8	-7.5	-2.2	75	8.0	-7.7	-2.0	67	16.1	-14.8	-6.3			
6	135	1.0	-0.7	0.7	118	4.2	-3.7	2.0	114	6.0	-5.5	2.5	96	7.7	-7.7	0.8	87	6.8	-6.8	-0.4	86	9.2	-9.2	-0.6	75	17.2	-16.6	-4.6			
7	128	1.6	-1.3	1.0	107	4.2	-4.0	1.2	108	5.5	-5.2	1.7	100	6.9	-6.8	1.2	82	7.5	-7.4	-1.0	82	9.6	-9.5	-1.4	81	15.3	-15.1	-2.5			
8	295	1.9	1.7	-0.8	130	2.5	-1.9	1.6	109	3.4	-3.2	1.1	77	4.1	-4.0	-0.9	83	7.5	-7.4	-0.9	78	11.8	-11.5	-2.5	69	15.3	-14.3	-5.4			
9	110	5.2	-4.9	1.8	115	6.2	-5.6	2.6	112	5.0	-4.6	1.9	118	3.6	-3.2	1.7	90	7.5	-7.5	0.0	73	7.7	-7.4	-2.3	76	15.6	-15.1	-3.8			
10	109	3.6	-3.4	1.2	112	3.7	-3.4	1.4	126	3.7	-3.0	2.2	114	3.4	-3.1	1.4	103	4.3	-4.2	1.0	83	10.3	-10.2	-1.2	75	14.9	-14.4	-3.9			
11	97	2.5	-2.5	0.3	128	1.1	-0.9	0.7	119	2.5	-2.2	1.2	95	2.5	-2.5	0.2	100	6.1	-6.0	1.1	91	8.4	-8.4	0.2	89	16.0	-16.0	-0.4			
12	212	0.9	0.5	0.8	137	1.6	-1.1	1.2	108	2.0	-1.9	0.6	84	3.1	-3.1	-0.3	73	6.3	-6.0	-1.8	80	9.0	-8.9	-1.5	76	14.5	-14.1	-3.5			
13	300	1.6	1.4	-0.8	62	1.7	-1.5	-0.8	90	2.2	-2.2	0.0	83	2.4	-2.4	-0.3	76	3.6	-3.5	-0.9	81	6.7	-6.6	-1.1	82	13.6	-13.5	-2.0			
14	69	1.4	-1.3	-0.5	96	3.6	-3.6	0.4	120	2.2	-1.9	1.1	99	1.9	-1.9	0.3	99	3.9	-3.9	0.6	100	7.7	-7.6	1.3	87	11.8	-11.8	-0.6			
15	99	2.4	-2.4	0.4	108	4.7	-4.5	1.5	109	5.0	-4.7	1.6	101	4.3	-4.2	0.8	92	4.7	-4.7	0.2	74	6.0	-5.8	-1.7	78	13.5	-13.2	-2.9			
16	92	2.5	-2.5	0.1	103	5.4	-5.3	1.2	110	5.9	-5.5	2.0	101	3.8	-3.7	0.7	87	4.3	-4.3	-0.2	85	7.6	-7.6	-0.7	74	13.6	-13.1	-3.8			
17	118	2.1	-1.9	1.0	118	4.7	-4.2	2.2	109	4.6	-4.4	1.5	107	4.2	-4.0	1.2	80	5.1	-5.0	-0.9	77	6.7	-6.5	-1.5	84	13.8	-13.7	-1.5			
18	103	4.4	-4.3	1.0	117	4.4	-3.9	2.0	102	3.8	-3.7	0.8	91	4.2	-4.2	0.1	83	4.1	-4.1	-0.5	87	6.4	-6.4	-0.3	79	12.0	-11.8	-2.3			
19	97	3.4	-3.4	0.4	104	5.5	-5.3	1.3	109	5.0	-4.7	1.6	109	3.4	-3.2	1.1	86	4.6	-4.6	-0.3	80	6.9	-6.8	-1.2	76	12.4	-12.0	-3.1			
20	112	4.2	-3.9	1.6	110	4.8	-4.5	1.6	104	3.4	-3.3	0.8	91	4.4	-4.4	0.1	82	4.2	-4.2	-0.6	79	4.4	-4.3	-0.8	79	14.9	-14.6	-2.8			
21	103	5.9	-5.8	1.3	105	5.0	-4.8	1.3	110	4.6	-4.3	1.6	101	2.6	-2.6	0.5	107	2.8	-2.7	0.8	101	3.2	-3.1	0.6	64	9.2	-8.3	-4.0			
22	104	3.4	-3.3	0.8	100	5.1	-5.0	0.9	109	4.2	-4.0	1.4	121	4.2	-3.6	2.2	64	2.8	-2.5	-1.2	82	3.7	-3.7	-0.5	71	8.5	-8.0	-2.8			
23	128	2.3	-1.8	1.4	103	3.6	-3.5	0.8	92	3.0	-3.0	0.1	65	1.7	-1.5	-0.7	50	1.7	-1.3	-1.1	42	3.6	-2.4	-2.7	85	10.4	-10.4	-0.9			
24	114	1.7	-1.6	0.7	148	1.3	-0.7	1.1	135	1.3	-0.9	0.9	176	1.4	-0.1	1.4	72	1.9	-1.8	-0.6	53	2.6	-2.1	-1.6	77	10.3	-10.0	-2.3			
25	88	3.0	-3.0	-0.1	208	1.5	0.7	1.3	257	2.2	2.1	0.5	153	0.2	-0.1	0.2	82	2.2	-2.2	-0.3	101	3.3	-3.2	0.6	86	12.9	-12.9	-0.8			
26	94	4.6	-4.6	0.3	204	1.0	0.4	0.9	138	1.3	-0.9	1.0	121	2.1	-1.8	1.1	96	2.8	-2.8	0.3	88	5.0	-5.0	-0.2	82	11.4	-11.3	-1.6			
27	121	2.6	-2.2	1.3	108	1.3	-1.2	0.4	153	0.4	-0.2	0.4	104	3.4	-3.3	0.8	120	3.0	-2.6	1.5	80	6.4	-6.3	-1.1	94	10.3	-10.3	0.7			
28	97	3.2	-3.2	0.4	109	1.8	-1.7	0.6	99	1.3	-1.3	0.2	80	2.2	-2.2	-0.4	108	2.2	-2.1	0.7	87	4.1	-4.1	-0.2	89	10.0	-10.0	-0.2			
29	96	4.1	-4.1	0.4	110	2.7	-2.5	0.9	97	2.6	-2.6	0.3	92	3.2	-3.2	0.1	90	3.3	-3.3	0.0	72	4.5	-4.3	-1.4	86	9.3	-9.3	-0.6			
30	90	5.3	-5.3	0.0	103	4.1	-4.0	0.9	103	3.6	-3.5	0.8	88	2.5	-2.5	-0.1	94	3.1	-3.1	0.2	105	2.8	-2.7	0.7	81	8.8	-8.7	-1.4			
31	97	4.8	-4.8	0.6	118	4.7	-4.2	2.2	118	4.4	-3.9	2.1	86	3.1	-3.1	-0.2	77	3.2	-3.1	-0.7	90	1.4	-1.4	0.0	73	8.1	-7.7	-2.4			

Daily Normals of Upper Air Winds (1971-2000)

GORAKHPUR

SEPTEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	97	5.0	-5.0	0.6	112	4.3	-4.0	1.6	103	4.8	-4.7	1.1	108	4.6	-4.4	1.4	147	3.1	-1.7	2.6	122	2.2	-1.9	1.2	84	6.2	-6.2	-0.6
2	103	6.5	-6.3	1.5	120	4.0	-3.5	2.0	115	4.2	-3.8	1.8	97	3.4	-3.4	0.4	122	1.9	-1.6	1.0	102	4.4	-4.3	0.9	77	8.8	-8.6	-2.0
3	102	6.6	-6.4	1.4	117	2.7	-2.4	1.2	124	2.9	-2.4	1.6	126	1.7	-1.4	1.0	145	2.1	-1.2	1.7	111	3.6	-3.4	1.3	75	6.7	-6.5	-1.7
4	101	5.4	-5.3	1.0	107	2.8	-2.7	0.8	103	4.0	-3.9	0.9	91	3.9	-3.9	0.1	99	3.7	-3.7	0.6	104	3.0	-2.9	0.7	80	9.1	-9.0	-1.6
5	104	4.5	-4.4	1.1	109	1.8	-1.7	0.6	99	3.1	-3.1	0.5	110	1.5	-1.4	0.5	125	1.6	-1.3	0.9	156	1.0	-0.4	0.9	90	7.9	-7.9	0.0
6	94	5.3	-5.3	0.4	116	3.0	-2.7	1.3	92	2.3	-2.3	0.1	97	2.6	-2.6	0.3	142	1.6	-1.0	1.3	121	2.9	-2.5	1.5	83	5.7	-5.7	-0.7
7	104	5.7	-5.5	1.4	119	3.3	-2.9	1.6	108	4.0	-3.8	1.2	129	3.6	-2.8	2.3	132	3.0	-2.2	2.0	105	4.2	-4.1	1.1	89	8.8	-8.8	-0.1
8	108	4.9	-4.7	1.5	120	3.2	-2.8	1.6	113	3.3	-3.0	1.3	140	4.0	-2.6	3.1	175	3.2	-0.3	3.2	141	5.0	-3.2	3.9	100	9.2	-9.1	1.6
9	96	3.9	-3.9	0.4	120	3.4	-3.0	1.7	127	3.4	-2.7	2.0	152	2.4	-1.1	2.1	194	4.0	1.0	3.9	150	3.9	-2.0	3.4	108	8.6	-8.2	2.6
10	105	2.0	-1.9	0.5	115	4.2	-3.8	1.8	105	3.0	-2.9	0.8	174	2.0	-0.2	2.0	148	2.8	-1.5	2.4	188	3.5	0.5	3.5	103	8.3	-8.1	1.8
11	90	1.7	-1.7	0.0	100	3.6	-3.5	0.6	111	0.9	-0.8	0.3	187	2.3	0.3	2.3	213	3.7	2.0	3.1	156	3.5	-1.4	3.2	100	6.5	-6.4	1.1
12	90	1.7	-1.7	0.0	106	4.3	-4.1	1.2	119	3.8	-3.3	1.8	168	2.9	-0.6	2.8	208	3.0	1.4	2.6	152	3.0	-1.4	2.6	65	6.3	-5.7	-2.6
13	98	2.1	-2.1	0.3	104	3.0	-2.9	0.7	108	3.8	-3.6	1.2	114	2.4	-2.2	1.0	238	2.5	2.1	1.3	255	2.7	2.6	0.7	95	4.3	-4.3	0.4
14	93	2.0	-2.0	0.1	86	1.3	-1.3	-0.1	84	2.0	-2.0	-0.2	90	0.5	-0.5	0.0	263	3.2	3.2	0.4	241	2.5	2.2	1.2	82	3.5	-3.5	-0.5
15	71	4.3	-4.1	-1.4	99	3.6	-3.6	0.6	116	3.0	-2.7	1.3	225	0.4	0.3	0.3	257	4.1	4.0	0.9	259	3.3	3.2	0.6	84	1.9	-1.9	-0.2
16	78	3.9	-3.8	-0.8	113	1.3	-1.2	0.5	108	2.3	-2.2	0.7	148	0.9	-0.5	0.8	229	5.0	3.8	3.3	211	4.4	2.3	3.8	176	2.7	-0.2	2.7
17	81	2.0	-2.0	-0.3	169	0.5	-0.1	0.5	96	0.9	-0.9	0.1	252	1.3	1.2	0.4	264	6.5	6.5	0.7	268	5.6	5.6	0.2	302	0.9	0.8	-0.5
18	72	3.5	-3.3	-1.1	93	3.5	-3.5	0.2	96	1.9	-1.9	0.2	228	1.5	1.1	1.0	271	4.7	4.7	-0.1	253	7.5	7.2	2.2	10	1.1	-0.2	-1.1
19	252	0.9	0.9	0.3	237	1.7	1.4	0.9	298	1.5	1.3	-0.7	263	2.5	2.5	0.3	261	5.6	5.5	0.9	246	8.1	7.4	3.3	37	1.5	-0.9	-1.2
20	340	1.2	0.4	-1.1	360	0.8	0.0	-0.8	51	0.6	-0.5	-0.4	245	1.9	1.7	0.8	257	6.1	5.9	1.4	248	6.7	6.2	2.5	90	0.9	-0.9	0.0
21	13	0.9	-0.2	-0.9	87	2.0	-2.0	-0.1	119	1.3	-1.1	0.6	233	0.5	0.4	0.3	259	5.6	5.5	1.1	238	7.3	6.2	3.8	302	6.1	5.2	-3.2
22	259	0.5	0.5	0.1	207	0.2	0.1	0.2	45	0.3	-0.2	-0.2	253	3.4	3.3	1.0	248	7.9	7.3	3.0	262	8.3	8.2	1.1	196	2.9	0.8	2.8
23	281	1.0	1.0	-0.2	270	0.1	0.1	0.0	95	1.1	-1.1	0.1	256	3.2	3.1	0.8	250	9.4	8.8	3.2	250	10.3	9.7	3.6	255	3.9	3.8	1.0
24	45	1.0	-0.7	-0.7	72	0.3	-0.3	-0.1	135	1.8	-1.3	1.3	242	4.4	3.9	2.1	253	11.7	11.2	3.4	247	11.3	10.4	4.5	217	1.5	0.9	1.2
25	322	1.6	1.0	-1.3	301	0.6	0.5	-0.3	326	1.4	0.8	-1.2	271	4.9	4.9	-0.1	252	9.3	8.8	2.9	241	11.6	10.2	5.6	229	2.9	2.2	1.9
26	117	0.9	-0.8	0.4	304	1.1	0.9	-0.6	317	1.9	1.3	-1.4	277	4.1	4.1	-0.5	245	9.8	8.9	4.1	245	11.6	10.5	5.0	263	3.1	3.1	0.4
27	294	1.7	1.6	-0.7	300	2.2	1.9	-1.1	326	2.7	1.5	-2.2	261	4.9	4.8	0.8	252	11.6	11.1	3.5	246	16.4	15.0	6.6	239	5.2	4.5	2.7
28	207	1.3	0.6	1.2	297	1.8	1.6	-0.8	294	2.4	2.2	-1.0	273	5.6	5.6	-0.3	243	11.4	10.2	5.1	248	11.8	10.9	4.4	237	5.9	5.0	3.2
29	360	0.5	0.0	-0.5	310	2.3	1.8	-1.5	298	2.7	2.4	-1.3	269	5.5	5.5	0.1	249	14.0	13.1	5.0	248	13.3	12.4	4.9	259	4.4	4.3	0.8
30	283	1.7	1.7	-0.4	295	2.1	1.9	-0.9	313	1.6	1.2	-1.1	265	7.4	7.4	0.6	257	13.0	12.6	3.0	252	14.8	14.1	4.5	256	4.0	3.9	1.0

Daily Normals of Upper Air Winds (1971-2000)

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GORAKHPUR

OCTOBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	211	0.6	0.3	0.5	270	1.5	1.5	0.0	294	1.0	0.9	-0.4	266	6.3	6.3	0.4	250	14.6	13.7	5.1	247	16.0	14.7	6.3	251	8.6	8.1	2.8			
2	360	0.2	0.0	-0.2	309	0.6	0.5	-0.4	287	2.4	2.3	-0.7	261	6.1	6.0	0.9	249	14.2	13.3	5.0	250	15.3	14.4	5.3	246	11.4	10.4	4.7			
3	39	1.3	-0.8	-1.0	333	0.7	0.3	-0.6	292	1.8	1.7	-0.7	269	4.6	4.6	0.1	251	14.5	13.7	4.8	260	18.1	17.8	3.0	251	6.7	6.3	2.2			
4	70	2.0	-1.9	-0.7	278	1.4	1.4	-0.2	276	2.0	2.0	-0.2	259	6.8	6.7	1.3	253	14.3	13.7	4.2	251	19.2	18.2	6.2	251	6.0	5.7	2.0			
5	27	0.7	-0.3	-0.6	304	0.7	0.6	-0.4	283	1.7	1.7	-0.4	266	5.4	5.4	0.4	254	14.0	13.5	3.8	251	18.2	17.2	5.9	234	13.1	10.6	7.7			
6	325	1.2	0.7	-1.0	284	1.6	1.6	-0.4	270	0.9	0.9	0.0	257	5.2	5.1	1.2	252	15.1	14.4	4.7	250	17.7	16.6	6.0	247	12.0	11.1	4.6			
7	276	1.9	1.9	-0.2	288	3.2	3.0	-1.0	275	1.1	1.1	-0.1	276	6.4	6.4	-0.7	247	16.5	15.2	6.5	248	18.8	17.4	7.2	253	7.4	7.1	2.2			
8	267	1.8	1.8	0.1	259	1.5	1.5	0.3	326	0.7	0.4	-0.6	254	6.8	6.5	1.9	247	16.8	15.4	6.6	250	20.1	18.8	7.0	251	12.2	11.6	3.9			
9	265	2.2	2.2	0.2	267	2.1	2.1	0.1	289	2.4	2.3	-0.8	266	7.4	7.4	0.5	263	17.3	17.2	2.0	255	20.3	19.6	5.3	249	12.5	11.7	4.5			
10	262	2.1	2.1	0.3	274	2.6	2.6	-0.2	282	3.8	3.7	-0.8	274	10.3	10.3	-0.7	263	18.9	18.8	2.2	256	23.1	22.4	5.7	255	14.6	14.1	3.9			
11	276	2.8	2.8	-0.3	279	1.9	1.9	-0.3	290	3.2	3.0	-1.1	272	10.6	10.6	-0.3	258	23.5	23.0	4.9	253	21.1	20.1	6.3	277	10.2	10.1	-1.3			
12	277	3.4	3.4	-0.4	277	2.4	2.4	-0.3	299	3.7	3.2	-1.8	271	9.3	9.3	-0.2	259	22.3	21.9	4.1	255	24.4	23.5	6.5	258	15.3	14.9	3.3			
13	259	2.1	2.1	0.4	274	2.7	2.7	-0.2	288	2.3	2.2	-0.7	278	9.1	9.0	-1.2	252	22.3	21.2	6.9	247	24.8	22.8	9.8	258	12.6	12.3	2.6			
14	279	3.2	3.2	-0.5	291	2.8	2.6	-1.0	295	2.3	2.1	-1.0	273	8.7	8.7	-0.5	250	21.1	19.8	7.4	243	23.7	21.2	10.7	255	15.1	14.6	3.9			
15	285	2.0	1.9	-0.5	290	2.7	2.5	-0.9	273	2.2	2.2	-0.1	278	8.9	8.8	-1.2	255	23.1	22.3	6.0	248	27.4	25.4	10.2	257	16.0	15.6	3.6			
16	328	0.9	0.5	-0.8	263	0.8	0.8	0.1	257	1.7	1.7	0.4	263	9.1	9.0	1.1	252	21.4	20.4	6.6	250	23.4	22.0	8.1	259	14.2	14.0	2.6			
17	298	1.5	1.3	-0.7	287	2.7	2.6	-0.8	302	3.8	3.2	-2.0	271	8.8	8.8	-0.2	256	20.0	19.4	4.7	254	23.6	22.7	6.6	257	13.9	13.6	3.1			
18	333	0.9	0.4	-0.8	268	2.6	2.6	0.1	298	3.2	2.8	-1.5	281	11.6	11.4	-2.2	264	23.0	22.9	2.5	255	25.1	24.3	6.3	260	15.1	14.9	2.6			
19	282	2.5	2.4	-0.5	285	2.7	2.6	-0.7	297	3.5	3.1	-1.6	273	11.0	11.0	-0.5	257	21.0	20.5	4.7	255	25.6	24.7	6.7	261	14.8	14.6	2.2			
20	277	1.7	1.7	-0.2	280	2.9	2.9	-0.5	306	3.2	2.6	-1.9	277	12.4	12.3	-1.5	255	26.7	25.8	6.7	251	27.3	25.8	8.8	256	16.9	16.4	4.2			
21	293	1.5	1.4	-0.6	290	2.7	2.5	-0.9	296	3.9	3.5	-1.7	282	9.5	9.3	-2.0	264	22.7	22.6	2.4	255	27.8	26.9	7.0	248	17.1	15.9	6.4			
22	290	2.9	2.7	-1.0	288	2.5	2.4	-0.8	311	4.0	3.0	-2.6	280	8.1	8.0	-1.4	266	21.0	20.9	1.6	256	23.9	23.2	5.9	253	17.8	17.0	5.3			
23	272	2.9	2.9	-0.1	277	3.2	3.2	-0.4	295	4.0	3.6	-1.7	276	9.9	9.8	-1.0	261	22.9	22.6	3.7	259	28.3	27.7	5.6	250	16.5	15.5	5.7			
24	307	2.6	2.1	-1.6	290	3.0	2.8	-1.0	287	3.4	3.2	-1.0	276	10.3	10.3	-1.0	260	23.7	23.3	4.3	260	26.0	25.6	4.4	259	17.8	17.5	3.3			
25	305	2.4	2.0	-1.4	287	2.8	2.7	-0.8	294	3.7	3.4	-1.5	278	11.4	11.3	-1.6	262	28.5	28.2	3.8	259	28.5	28.0	5.3	258	15.1	14.8	3.1			
26	291	2.5	2.3	-0.9	297	2.8	2.5	-1.3	311	4.6	3.5	-3.0	275	12.3	12.3	-1.1	263	27.4	27.2	3.3	256	33.7	32.7	8.0	261	25.5	25.2	4.1			
27	309	1.9	1.5	-1.2	286	2.9	2.8	-0.8	302	3.2	2.7	-1.7	276	11.0	10.9	-1.1	265	24.6	24.5	2.0	258	28.5	27.9	5.9	256	19.6	19.0	4.7			
28	327	1.7	0.9	-1.4	288	2.5	2.4	-0.8	310	3.1	2.4	-2.0	288	10.3	9.8	-3.2	260	30.6	30.2	5.2	256	31.9	30.9	7.9	252	21.8	20.7	6.8			
29	360	0.3	0.0	-0.3	288	1.6	1.5	-0.5	310	3.8	2.9	-2.4	281	10.6	10.4	-2.0	268	26.7	26.7	1.1	257	30.0	29.2	7.0	262	14.3	14.1	2.1			
30	301	1.7	1.5	-0.9	293	2.1	1.9	-0.8	293	4.1	3.8	-1.6	278	11.9	11.8	-1.7	263	29.3	29.1	3.7	253	35.6	34.0	10.7	267	15.7	15.7	0.9			
31	279	0.6	0.6	-0.1	300	2.0	1.7	-1.0	267	2.0	2.0	0.1	275	11.2	11.2	-1.0	264	27.0	26.8	2.9	257	32.7	31.9	7.1	258	17.7	17.3	3.6			

Daily Normals of Upper Air Winds (1971-2000)

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GORAKHPUR

NOVEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	291	1.9	1.8	-0.7	291	2.8	2.6	-1.0	293	3.3	3.0	-1.3	278	11.1	11.0	-1.5	261	25.0	24.7	3.7	257	29.4	28.7	6.4	270	19.8	19.8	0.1			
2	296	2.8	2.5	-1.2	291	2.5	2.3	-0.9	306	1.7	1.4	-1.0	282	12.6	12.3	-2.6	271	26.4	26.4	-0.3	256	32.9	32.0	7.7	268	16.1	16.1	0.6			
3	295	2.6	2.4	-1.1	285	2.0	1.9	-0.5	290	2.3	2.2	-0.8	279	13.4	13.2	-2.1	259	31.0	30.5	5.7	266	33.9	33.8	2.4	262	27.1	26.8	3.8			
4	293	2.1	1.9	-0.8	281	2.5	2.5	-0.5	298	4.2	3.7	-2.0	275	14.0	13.9	-1.2	269	26.8	26.8	0.7	256	33.2	32.1	8.3	261	25.8	25.5	4.2			
5	290	1.5	1.4	-0.5	290	2.9	2.7	-1.0	294	5.9	5.4	-2.4	285	15.5	15.0	-3.9	269	29.2	29.2	0.7	261	33.8	33.4	5.3	269	29.7	29.7	0.3			
6	263	1.6	1.6	0.2	276	2.9	2.9	-0.3	284	4.9	4.8	-1.2	265	15.0	15.0	1.2	260	30.5	30.0	5.5	256	33.7	32.7	8.3	262	25.9	25.7	3.4			
7	270	1.4	1.4	0.0	281	2.1	2.1	-0.4	299	5.3	4.6	-2.6	281	14.7	14.4	-2.8	273	30.1	30.1	-1.5	261	39.9	39.4	6.0	253	25.6	24.5	7.5			
8	306	1.7	1.4	-1.0	289	2.1	2.0	-0.7	301	5.1	4.4	-2.6	281	13.2	12.9	-2.6	265	27.4	27.3	2.2	259	35.8	35.2	6.6	257	24.9	24.3	5.6			
9	292	1.6	1.5	-0.6	293	1.3	1.2	-0.5	295	4.5	4.1	-1.9	278	16.6	16.4	-2.3	269	29.4	29.4	0.5	269	29.4	29.4	0.3	257	15.7	15.3	3.6			
10	292	2.9	2.7	-1.1	286	2.6	2.5	-0.7	283	5.0	4.9	-1.1	287	14.1	13.5	-4.0	273	29.1	29.1	-1.4	270	35.1	35.1	0.0	260	22.5	22.2	3.8			
11	310	2.5	1.9	-1.6	309	2.2	1.7	-1.4	290	6.6	6.2	-2.2	294	13.7	12.6	-5.5	282	27.2	26.6	-5.6	281	30.0	29.5	-5.7	280	20.4	20.1	-3.6			
12	283	3.2	3.1	-0.7	278	2.1	2.1	-0.3	299	5.3	4.6	-2.6	285	16.4	15.9	-4.2	271	26.4	26.4	-0.5	274	29.6	29.5	-2.3	275	16.0	15.9	-1.3			
13	286	2.5	2.4	-0.7	286	3.3	3.2	-0.9	306	6.0	4.9	-3.5	296	14.1	12.7	-6.2	283	26.5	25.8	-6.1	278	30.6	30.3	-4.0	290	16.9	15.8	-5.9			
14	278	2.2	2.2	-0.3	278	2.8	2.8	-0.4	302	5.2	4.4	-2.7	286	12.5	12.0	-3.4	276	25.0	24.8	-2.8	266	34.8	34.7	2.7	262	26.6	26.3	3.7			
15	304	0.7	0.6	-0.4	293	2.3	2.1	-0.9	292	6.2	5.8	-2.3	291	13.8	12.9	-5.0	277	27.3	27.1	-3.3	269	32.4	32.4	0.3	272	24.8	24.8	-0.9			
16	289	2.8	2.6	-0.9	293	2.8	2.6	-1.1	293	5.0	4.6	-2.0	284	14.7	14.3	-3.6	275	28.8	28.7	-2.3	270	35.0	35.0	0.0	271	20.7	20.7	-0.3			
17	311	2.1	1.6	-1.4	305	2.4	2.0	-1.4	289	4.6	4.3	-1.5	279	13.7	13.5	-2.2	261	28.0	27.7	4.3	260	42.2	41.6	7.2	265	21.5	21.4	1.8			
18	292	1.6	1.5	-0.6	302	1.5	1.3	-0.8	292	5.8	5.4	-2.2	267	14.9	14.9	0.9	261	30.2	29.8	4.6	256	35.8	34.8	8.5	253	24.5	23.4	7.2			
19	259	1.6	1.6	0.3	267	2.0	2.0	0.1	291	5.5	5.1	-2.0	270	15.6	15.6	0.0	261	34.1	33.7	5.5	256	43.7	42.4	10.6	260	30.9	30.4	5.6			
20	273	2.1	2.1	-0.1	285	2.0	1.9	-0.5	290	6.6	6.2	-2.3	282	15.9	15.6	-3.2	268	35.4	35.4	1.1	256	45.2	43.9	10.8	222	23.0	15.4	17.1			
21	281	2.5	2.5	-0.5	295	3.1	2.8	-1.3	297	5.6	5.0	-2.6	276	15.7	15.6	-1.6	256	29.4	28.6	7.0	247	40.8	37.5	16.0	246	39.6	36.1	16.3			
22	294	2.0	1.8	-0.8	284	2.1	2.0	-0.5	282	4.2	4.1	-0.9	270	12.6	12.6	0.1	261	31.4	31.0	4.9	247	38.2	35.2	14.9	253	17.4	16.7	5.0			
23	290	3.0	2.8	-1.0	301	2.9	2.5	-1.5	305	7.5	6.1	-4.3	278	17.1	16.9	-2.3	265	31.6	31.5	2.6	251	40.5	38.4	13.0	254	30.9	29.7	8.7			
24	283	4.1	4.0	-0.9	288	3.2	3.0	-1.0	292	7.1	6.6	-2.7	279	16.5	16.3	-2.5	266	32.2	32.1	2.5	262	31.1	30.8	4.6	292	8.5	7.9	-3.2			
25	278	2.9	2.9	-0.4	280	2.8	2.8	-0.5	284	7.9	7.7	-1.9	277	18.9	18.8	-2.2	265	27.9	27.8	2.2	265	37.4	37.3	3.2	279	25.5	25.2	-4.2			
26	265	2.2	2.2	0.2	277	2.6	2.6	-0.3	291	8.1	7.6	-2.9	280	19.5	19.2	-3.3	273	33.7	33.7	-1.6	268	32.2	32.2	1.0	261	26.9	26.6	4.0			
27	298	2.7	2.4	-1.3	291	3.0	2.8	-1.1	295	6.3	5.7	-2.7	278	20.9	20.7	-3.0	266	32.8	32.7	2.5	260	36.9	36.3	6.5	285	27.7	26.8	-7.1			
28	280	3.4	3.3	-0.6	299	3.5	3.1	-1.7	297	6.5	5.8	-3.0	279	18.3	18.1	-2.9	267	35.5	35.4	2.1	262	36.2	35.9	4.9	259	28.7	28.2	5.3			
29	287	4.1	3.9	-1.2	291	3.0	2.8	-1.1	302	7.9	6.7	-4.2	283	18.3	17.8	-4.2	265	34.3	34.2	3.0	265	39.4	39.3	3.3	270	22.8	22.8	0.0			
30	315	1.8	1.3	-1.3	291	2.8	2.6	-1.0	297	7.1	6.3	-3.2	282	18.6	18.2	-3.9	270	32.2	32.2	0.0	273	32.1	32.1	-1.7	273	24.0	24.0	-1.3			

Daily Normals of Upper Air Winds (1971-2000)

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GORAKHPUR

DECEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	285	2.3	2.2	-0.6	302	3.8	3.2	-2.0	295	7.1	6.4	-3.0	281	20.2	19.9	-3.7	271	37.0	37.0	-0.4	271	40.8	40.8	-0.6	264	47.0	46.7	4.9			
2	283	3.7	3.6	-0.8	295	3.8	3.5	-1.6	292	7.6	7.1	-2.8	280	17.7	17.4	-3.1	270	33.8	33.8	0.1	272	40.4	40.4	-1.4	267	35.8	35.7	2.0			
3	292	1.6	1.5	-0.6	302	3.4	2.9	-1.8	292	7.4	6.8	-2.8	277	16.7	16.6	-2.1	271	33.1	33.1	-0.3	275	38.6	38.5	-3.1	274	17.4	17.4	-1.2			
4	274	2.7	2.7	-0.2	294	3.5	3.2	-1.4	295	9.4	8.5	-3.9	282	19.8	19.4	-4.2	273	32.0	32.0	-1.4	276	39.0	38.8	-4.2	272	20.7	20.7	-0.8			
5	287	2.1	2.0	-0.6	306	2.4	1.9	-1.4	290	11.4	10.7	-4.0	281	18.0	17.7	-3.3	273	31.6	31.6	-1.4	278	37.3	37.0	-5.0	266	21.8	21.7	1.5			
6	302	1.9	1.6	-1.0	322	1.6	1.0	-1.3	286	8.2	7.9	-2.2	279	17.6	17.4	-2.8	269	33.8	33.8	0.3	268	34.5	34.5	1.0	260	27.5	27.1	4.9			
7	279	2.6	2.6	-0.4	305	1.9	1.6	-1.1	297	8.3	7.4	-3.7	277	19.7	19.5	-2.5	271	34.1	34.1	-0.6	263	37.2	36.9	4.8	273	16.0	16.0	-0.8			
8	288	2.2	2.1	-0.7	294	2.0	1.8	-0.8	294	10.7	9.7	-4.4	283	20.0	19.5	-4.5	269	34.8	34.8	0.8	253	41.2	39.4	12.1	263	43.4	43.0	5.5			
9	274	2.7	2.7	-0.2	303	3.0	2.5	-1.6	286	9.1	8.8	-2.5	269	17.3	17.3	0.3	265	33.8	33.7	3.0	262	38.4	38.0	5.3	266	27.9	27.8	2.0			
10	290	3.2	3.0	-1.1	293	4.8	4.4	-1.9	292	10.6	9.8	-4.0	286	18.8	18.0	-5.3	273	34.8	34.8	-1.6	268	39.3	39.3	1.6	258	31.6	30.9	6.8			
11	277	4.0	4.0	-0.5	290	3.8	3.6	-1.3	289	9.6	9.1	-3.1	276	20.8	20.7	-2.1	267	39.4	39.3	2.1	264	38.5	38.3	4.2	250	23.6	22.1	8.2			
12	280	3.5	3.4	-0.6	278	3.5	3.5	-0.5	285	9.3	9.0	-2.4	274	20.8	20.7	-1.5	269	37.7	37.7	0.9	265	41.4	41.2	3.8	260	23.0	22.7	4.0			
13	273	4.1	4.1	-0.2	282	4.2	4.1	-0.9	290	10.3	9.7	-3.5	271	21.7	21.7	-0.4	263	38.2	37.9	4.8	268	46.5	46.5	1.6	252	24.4	23.2	7.4			
14	281	3.7	3.6	-0.7	296	4.6	4.1	-2.0	288	10.5	10.0	-3.3	279	20.7	20.4	-3.3	267	37.9	37.9	1.7	265	38.2	38.0	3.6	260	43.4	42.7	7.6			
15	277	4.0	4.0	-0.5	286	4.0	3.8	-1.1	290	10.3	9.7	-3.6	287	18.5	17.7	-5.4	273	33.4	33.4	-1.7	273	42.8	42.8	-2.0	261	31.0	30.6	4.8			
16	287	1.4	1.3	-0.4	293	4.1	3.8	-1.6	290	9.2	8.6	-3.2	275	18.9	18.8	-1.5	274	33.6	33.5	-2.3	268	39.3	39.3	1.2	270	31.4	31.4	0.1			
17	286	1.8	1.7	-0.5	296	3.0	2.7	-1.3	291	9.3	8.7	-3.4	278	18.7	18.5	-2.5	276	29.3	29.1	-3.2	265	37.4	37.2	3.4	265	29.8	29.7	2.5			
18	315	1.4	1.0	-1.0	286	4.4	4.2	-1.2	287	9.4	9.0	-2.8	291	15.4	14.3	-5.6	284	34.6	33.6	-8.2	271	37.3	37.3	-0.9	280	19.2	18.9	-3.3			
19	292	1.8	1.7	-0.7	292	3.1	2.9	-1.2	293	8.3	7.6	-3.3	285	19.3	18.6	-5.0	271	31.8	31.8	-0.5	267	36.5	36.4	2.2	279	23.4	23.1	-3.7			
20	275	1.1	1.1	-0.1	292	2.7	2.5	-1.0	294	7.2	6.6	-2.9	277	17.6	17.5	-2.2	269	32.0	32.0	0.4	263	38.0	37.7	4.4	259	33.7	33.1	6.2			
21	270	2.0	2.0	0.0	309	2.1	1.6	-1.3	297	8.5	7.6	-3.9	293	20.2	18.6	-7.9	275	34.1	34.0	-2.9	278	34.1	33.8	-4.7	268	13.4	13.4	0.4			
22	310	1.7	1.3	-1.1	297	3.5	3.1	-1.6	289	10.2	9.6	-3.3	278	21.5	21.3	-3.0	274	37.3	37.2	-2.8	291	30.6	28.6	-10.9	265	26.1	26.0	2.3			
23	313	2.1	1.5	-1.4	306	2.4	1.9	-1.4	291	7.9	7.4	-2.9	280	19.2	18.9	-3.3	276	32.3	32.1	-3.4	274	32.0	31.9	-2.3	247	27.5	25.3	10.9			
24	287	1.0	1.0	-0.3	259	0.5	0.5	0.1	300	5.9	5.1	-3.0	275	16.4	16.3	-1.5	269	32.2	32.2	0.3	264	34.3	34.1	3.5	266	34.2	34.1	2.5			
25	230	0.8	0.6	0.5	210	1.4	0.7	1.2	283	6.2	6.0	-1.4	283	16.3	15.9	-3.7	276	33.8	33.6	-3.6	272	39.5	39.5	-1.5	265	23.6	23.5	2.0			
26	270	3.4	3.4	0.0	280	2.3	2.3	-0.4	291	10.3	9.6	-3.7	280	19.3	19.0	-3.2	276	38.5	38.3	-3.8	277	47.5	47.2	-5.4	274	31.9	31.8	-2.3			
27	305	1.9	1.6	-1.1	285	2.0	1.9	-0.5	289	5.8	5.5	-1.9	270	20.1	20.1	-0.1	265	36.3	36.2	2.9	265	43.0	42.8	3.8	258	34.0	33.3	6.8			
28	347	1.3	0.3	-1.3	307	3.1	2.5	-1.9	287	8.8	8.4	-2.6	282	18.1	17.7	-3.7	277	36.1	35.8	-4.7	275	39.4	39.3	-3.1	261	23.5	23.2	3.8			
29	289	2.4	2.3	-0.8	291	4.3	4.0	-1.5	290	9.2	8.7	-3.1	280	21.8	21.5	-3.6	272	36.4	36.4	-1.0	267	38.2	38.1	2.2	—	—	—	—			
30	278	2.2	2.2	-0.3	280	3.5	3.4	-0.6	281	9.9	9.7	-1.8	273	21.1	21.1	-1.2	263	37.3	37.0	4.4	256	41.8	40.6	10.1	261	24.5	24.2	3.8			
31	290	3.2	3.0	-1.1	280	3.4	3.3	-0.6	288	9.5	9.0	-2.9	280	20.3	20.0	-3.7	269	31.3	31.3	0.8	257	36.0	35.1	8.1	242	39.1	34.7	18.1			

Daily Normals of Upper Air Winds (1971-2000)

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GUWAHATI

JANUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	84	1.0	-1.0	-0.1	217	0.5	0.3	0.4	266	6.3	6.3	0.4	273	23.8	23.8	-1.2	269	40.0	40.0	0.4	266	47.2	47.1	3.7	263	26.5	26.3	3.1			
2	77	2.2	-2.1	-0.5	204	1.2	0.5	1.1	251	4.3	4.1	1.4	269	21.4	21.4	0.3	274	43.4	43.3	-3.2	270	46.5	46.5	0.2	271	26.9	26.9	-0.3			
3	83	2.4	-2.4	-0.3	235	1.2	1.0	0.7	269	4.6	4.6	0.1	277	20.0	19.9	-2.4	277	43.7	43.4	-5.4	266	49.9	49.8	3.2	267	27.4	27.4	1.2			
4	100	1.7	-1.7	0.3	166	0.8	-0.2	0.8	266	6.4	6.4	0.4	271	20.1	20.1	-0.5	271	38.9	38.9	-0.6	266	54.4	54.2	4.1	270	28.4	28.4	-0.1			
5	102	1.9	-1.9	0.4	157	0.8	-0.3	0.7	259	7.2	7.1	1.4	270	25.6	25.6	0.1	273	42.8	42.7	-2.4	268	46.5	46.5	2.0	269	32.9	32.9	0.8			
6	16	0.7	-0.2	-0.7	234	1.4	1.1	0.8	263	5.4	5.4	0.7	272	25.2	25.2	-1.0	271	44.9	44.9	-0.5	271	46.3	46.3	-0.8	275	29.0	28.9	-2.3			
7	104	1.6	-1.6	0.4	249	0.9	0.8	0.3	252	5.8	5.5	1.8	275	26.0	25.9	-2.1	266	45.8	45.7	3.2	256	50.0	48.5	12.2	260	26.0	25.6	4.4			
8	73	2.1	-2.0	-0.6	229	1.1	0.8	0.7	260	6.1	6.0	1.1	271	23.3	23.3	-0.5	264	40.7	40.5	4.1	259	52.0	51.1	9.6	255	27.9	27.0	7.1			
9	37	1.0	-0.6	-0.8	242	1.5	1.3	0.7	257	9.2	9.0	2.0	270	25.4	25.4	-0.2	266	43.7	43.6	2.7	268	48.4	48.4	2.1	270	31.9	31.9	0.1			
10	333	0.4	0.2	-0.4	266	2.9	2.9	0.2	268	8.3	8.3	0.3	270	25.9	25.9	0.2	269	41.8	41.8	0.5	261	46.4	45.8	7.6	266	30.7	30.6	2.2			
11	171	0.6	-0.1	0.6	223	2.1	1.4	1.5	268	8.0	8.0	0.3	273	27.9	27.9	-1.3	267	48.5	48.4	2.5	258	49.3	48.3	9.9	263	35.5	35.3	4.2			
12	18	0.3	-0.1	-0.3	241	3.3	2.9	1.6	267	10.0	10.0	0.5	267	28.0	28.0	1.4	268	43.7	43.7	1.8	260	50.8	50.0	9.1	265	32.7	32.6	3.0			
13	31	0.6	-0.3	-0.5	257	3.5	3.4	0.8	264	9.4	9.3	1.0	274	26.2	26.1	-2.0	266	40.0	39.9	2.6	264	50.3	50.0	5.3	267	28.6	28.6	1.6			
14	18	0.3	-0.1	-0.3	249	2.8	2.6	1.0	266	9.2	9.2	0.7	273	28.3	28.3	-1.6	271	44.2	44.2	-0.7	265	48.8	48.6	4.6	264	26.7	26.5	3.0			
15	45	0.7	-0.5	-0.5	250	2.7	2.5	0.9	264	7.0	7.0	0.7	275	26.7	26.6	-2.2	274	45.9	45.8	-3.3	264	48.9	48.6	5.5	269	31.8	31.8	0.3			
16	106	1.9	-1.8	0.5	230	2.5	1.9	1.6	260	9.1	9.0	1.6	273	25.8	25.8	-1.2	274	41.6	41.5	-2.6	270	42.1	42.1	-0.1	270	26.0	26.0	-0.1			
17	67	1.3	-1.2	-0.5	243	2.9	2.6	1.3	268	8.0	8.0	0.3	272	25.8	25.8	-1.0	271	45.7	45.7	-1.0	266	46.8	46.7	3.6	266	26.6	26.5	1.7			
18	72	1.3	-1.2	-0.4	240	2.0	1.7	1.0	264	5.7	5.7	0.6	277	23.5	23.3	-2.8	269	42.5	42.5	0.6	263	51.4	51.0	6.0	266	29.6	29.5	1.9			
19	117	0.2	-0.2	0.1	240	2.4	2.1	1.2	260	6.9	6.8	1.2	270	24.8	24.8	0.2	269	42.4	42.4	0.8	265	47.8	47.6	4.4	274	30.2	30.1	-2.2			
20	55	2.1	-1.7	-1.2	225	1.6	1.1	1.1	252	5.9	5.6	1.8	271	22.4	22.4	-0.3	269	40.2	40.2	0.6	261	49.3	48.6	8.1	267	33.4	33.4	1.7			
21	360	0.7	0.0	-0.7	248	1.8	1.7	0.7	266	5.9	5.9	0.4	271	25.1	25.1	-0.6	263	40.5	40.2	5.1	259	45.2	44.4	8.5	260	27.1	26.7	4.9			
22	51	0.6	-0.5	-0.4	253	3.0	2.9	0.9	266	8.1	8.1	0.5	270	25.4	25.4	-0.1	267	41.7	41.6	2.5	251	47.6	45.1	15.3	266	32.3	32.2	2.3			
23	63	0.2	-0.2	-0.1	254	3.7	3.6	1.0	266	9.7	9.7	0.7	270	24.7	24.7	0.0	265	41.2	41.0	3.8	261	50.0	49.4	7.4	269	28.6	28.6	0.4			
24	30	0.8	-0.4	-0.7	241	2.1	1.8	1.0	267	5.9	5.9	0.3	275	25.6	25.5	-2.1	268	38.6	38.6	1.1	265	42.4	42.2	3.9	260	24.2	23.9	4.0			
25	32	0.9	-0.5	-0.8	256	2.1	2.0	0.5	262	8.0	7.9	1.1	274	21.5	21.5	-1.4	270	33.7	33.7	0.2	268	37.5	37.5	1.6	269	26.0	26.0	0.6			
26	50	1.6	-1.2	-1.0	232	1.8	1.4	1.1	258	7.1	6.9	1.5	270	24.3	24.3	0.1	270	39.9	39.9	0.1	267	41.4	41.4	1.9	266	22.3	22.2	1.6			
27	76	1.6	-1.6	-0.4	249	2.2	2.1	0.8	266	9.3	9.3	0.6	267	22.6	22.6	1.1	268	36.9	36.9	1.0	268	46.6	46.6	1.7	264	24.4	24.3	2.7			
28	285	1.6	1.5	-0.4	247	3.9	3.6	1.5	254	9.0	8.6	2.5	268	25.8	25.8	0.9	263	35.5	35.2	4.4	260	47.3	46.6	7.9	266	32.2	32.1	2.5			
29	250	1.2	1.1	0.4	253	3.9	3.7	1.1	261	9.8	9.7	1.5	268	25.4	25.4	1.0	270	40.5	40.5	-0.1	259	48.0	47.1	9.0	272	26.8	26.8	-0.9			
30	261	1.9	1.9	0.3	243	3.7	3.3	1.7	264	9.6	9.5	1.0	271	25.0	25.0	-0.5	273	41.6	41.5	-2.2	263	46.5	46.1	5.9	267	26.1	26.1	1.5			
31	37	1.0	-0.6	-0.8	250	4.6	4.3	1.6	262	9.3	9.2	1.3	271	27.9	27.9	-0.3	268	40.8	40.8	1.1	265	45.1	44.9	3.7	256	21.7	21.1	5.1			

Daily Normals of Upper Air Winds (1971-2000)

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GUWAHATI

FEBRUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	90	2.6	-2.6	0.0	240	3.9	3.4	2.0	258	9.9	9.7	2.0	265	26.0	25.9	2.2	265	38.7	38.6	3.2	262	45.6	45.1	6.7	270	22.7	22.7	-0.1			
2	65	1.4	-1.3	-0.6	249	5.1	4.8	1.8	260	12.5	12.3	2.1	270	29.0	29.0	-0.2	274	42.6	42.5	-2.8	264	44.6	44.3	4.8	265	32.8	32.7	2.8			
3	53	0.5	-0.4	-0.3	246	3.7	3.4	1.5	264	10.0	10.0	1.0	274	25.7	25.6	-1.7	268	43.7	43.7	1.4	268	51.1	51.1	1.8	271	30.3	30.3	-0.4			
4	275	1.1	1.1	-0.1	252	4.8	4.6	1.5	265	10.8	10.8	0.9	271	25.8	25.8	-0.6	269	43.7	43.7	0.7	263	47.1	46.7	6.0	265	31.3	31.2	2.7			
5	221	1.1	0.7	0.8	251	5.2	4.9	1.7	259	12.1	11.9	2.4	265	25.3	25.2	2.4	269	43.7	43.7	1.0	266	50.9	50.8	3.7	263	30.4	30.2	3.6			
6	342	0.9	0.3	-0.9	243	4.7	4.2	2.1	260	10.7	10.5	1.9	273	24.5	24.5	-1.2	267	40.6	40.6	1.8	262	43.1	42.7	6.2	270	26.7	26.7	-0.1			
7	27	0.7	-0.3	-0.6	237	3.1	2.6	1.7	256	8.5	8.3	2.0	271	21.1	21.1	-0.2	273	35.8	35.8	-1.6	267	47.6	47.5	2.4	266	33.3	33.2	2.6			
8	32	0.9	-0.5	-0.8	242	3.2	2.8	1.5	259	9.1	8.9	1.8	274	22.0	21.9	-1.7	271	38.8	38.8	-0.6	267	42.8	42.7	2.3	261	24.6	24.3	4.0			
9	333	0.4	0.2	-0.4	256	3.8	3.7	0.9	256	8.5	8.3	2.0	267	20.4	20.4	0.9	267	36.0	36.0	1.7	264	44.9	44.7	4.6	266	30.6	30.5	1.9			
10	27	0.2	-0.1	-0.2	241	2.6	2.3	1.3	255	7.5	7.3	1.9	273	22.1	22.1	-1.2	271	35.5	35.5	-0.8	270	45.5	45.5	0.2	271	30.9	30.9	-0.6			
11	312	1.3	1.0	-0.9	249	4.9	4.6	1.8	256	9.3	9.0	2.2	272	25.3	25.3	-0.8	270	36.8	36.8	-0.1	272	40.9	40.9	-1.2	271	22.5	22.5	-0.5			
12	360	0.7	0.0	-0.7	257	3.5	3.4	0.8	255	8.8	8.5	2.2	274	21.9	21.8	-1.5	277	40.9	40.6	-5.1	269	48.0	48.0	0.6	274	27.3	27.2	-2.1			
13	280	1.7	1.7	-0.3	247	4.4	4.1	1.7	254	10.0	9.6	2.7	273	24.1	24.1	-1.1	271	41.5	41.5	-0.9	269	44.7	44.7	0.4	268	23.6	23.6	0.8			
14	360	1.6	0.0	-1.6	242	4.7	4.2	2.2	261	11.1	11.0	1.7	273	26.7	26.7	-1.2	270	42.2	42.2	0.1	270	49.0	49.0	0.0	273	26.8	26.8	-1.6			
15	333	0.4	0.2	-0.4	249	5.3	5.0	1.9	257	10.6	10.3	2.4	270	24.0	24.0	0.1	268	37.0	37.0	1.5	261	46.3	45.7	7.5	263	26.5	26.3	3.2			
16	242	2.6	2.3	1.2	247	6.6	6.1	2.6	264	12.7	12.6	1.4	270	25.7	25.7	0.1	274	38.4	38.3	-2.5	268	45.6	45.6	1.6	267	27.1	27.1	1.6			
17	285	1.6	1.5	-0.4	252	6.6	6.3	2.0	263	13.9	13.8	1.6	270	26.8	26.8	-0.1	269	45.8	45.8	0.5	270	43.6	43.6	-0.3	260	25.8	25.4	4.6			
18	276	2.9	2.9	-0.3	252	7.0	6.6	2.2	257	12.3	12.0	2.8	269	26.7	26.7	0.5	267	43.8	43.7	2.2	260	46.2	45.6	7.7	269	28.3	28.3	0.6			
19	263	3.4	3.4	0.4	247	6.1	5.6	2.4	260	13.2	13.0	2.2	268	24.8	24.8	0.8	262	43.3	42.9	6.0	258	42.7	41.8	8.6	260	21.4	21.1	3.8			
20	278	2.2	2.2	-0.3	252	4.9	4.7	1.5	259	10.6	10.4	2.1	267	22.7	22.7	1.1	264	39.5	39.3	4.2	263	41.8	41.5	4.9	267	22.5	22.5	1.0			
21	266	1.6	1.6	0.1	252	5.1	4.8	1.6	259	11.0	10.8	2.1	269	24.1	24.1	0.3	260	41.5	40.9	7.1	256	45.3	44.0	10.8	263	27.2	27.0	3.5			
22	261	5.9	5.8	0.9	251	7.0	6.6	2.3	262	11.8	11.7	1.7	273	24.0	24.0	-1.1	264	43.2	43.0	4.2	257	43.3	42.2	9.8	266	31.6	31.5	2.0			
23	9	1.2	-0.2	-1.2	245	4.0	3.6	1.7	259	11.2	11.0	2.1	270	24.1	24.1	-0.2	261	41.6	41.1	6.4	261	49.8	49.2	7.6	263	31.6	31.4	3.7			
24	297	0.4	0.4	-0.2	246	4.6	4.2	1.9	264	10.3	10.3	1.0	274	24.0	23.9	-1.7	270	42.8	42.8	0.1	266	47.6	47.5	3.7	269	26.9	26.9	0.3			
25	284	1.2	1.2	-0.3	253	4.2	4.0	1.2	261	11.8	11.6	1.9	272	24.8	24.8	-0.7	269	41.0	41.0	0.8	262	47.8	47.3	6.8	269	29.3	29.3	0.5			
26	273	1.8	1.8	-0.1	249	5.3	4.9	1.9	255	11.3	10.9	2.9	273	23.3	23.3	-1.4	266	32.5	32.4	2.3	263	37.3	37.0	4.4	262	24.9	24.7	3.5			
27	273	3.8	3.8	-0.2	251	5.2	4.9	1.7	254	11.6	11.2	3.2	267	22.8	22.8	1.0	266	35.2	35.1	2.3	262	43.8	43.3	6.3	264	28.3	28.2	2.9			
28	348	1.4	0.3	-1.4	252	5.5	5.2	1.7	260	12.7	12.5	2.1	268	25.7	25.7	1.0	267	38.2	38.1	2.1	258	43.6	42.6	9.3	267	27.4	27.4	1.5			
29	69	4.0	-3.7	-1.4	243	4.2	3.7	1.9	260	13.5	13.3	2.3	274	30.6	30.5	-2.3	276	39.2	39.0	-3.9	265	42.1	41.9	3.9	278	23.1	22.9	-3.2			

Daily Normals of Upper Air Winds (1971-2000)

123

GUWAHATI

MARCH

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	194	0.4	0.1	0.4	250	5.8	5.4	2.0	262	11.6	11.5	1.6	269	22.3	22.3	0.3	264	40.6	40.4	4.0	266	43.0	42.9	3.1	265	28.3	28.2	2.3			
2	4	1.6	-0.1	-1.6	251	5.6	5.3	1.8	260	9.7	9.6	1.7	272	21.9	21.9	-0.6	264	33.9	33.7	3.5	256	40.7	39.5	10.0	270	25.9	25.9	-0.1			
3	285	2.3	2.2	-0.6	251	4.6	4.4	1.5	255	7.9	7.6	2.1	273	21.2	21.2	-1.2	275	33.9	33.8	-2.8	267	39.4	39.3	2.0	265	20.1	20.0	1.7			
4	319	0.9	0.6	-0.7	244	2.5	2.3	1.1	260	10.2	10.1	1.7	269	21.1	21.1	0.2	277	31.6	31.4	-3.8	265	41.1	41.0	3.5	265	25.9	25.8	2.1			
5	315	1.0	0.7	-0.7	247	6.5	6.0	2.6	257	12.5	12.2	2.8	270	26.1	26.1	0.1	266	39.0	38.9	2.6	262	43.4	43.0	6.0	269	23.9	23.9	0.6			
6	299	2.1	1.8	-1.0	253	6.1	5.8	1.8	259	15.4	15.1	3.0	272	23.1	23.1	-0.9	266	36.3	36.2	2.6	265	37.5	37.4	3.2	254	18.8	18.1	5.1			
7	262	2.8	2.8	0.4	245	7.7	7.0	3.2	257	13.2	12.9	3.0	273	21.5	21.5	-1.3	269	35.1	35.1	0.4	260	35.1	34.6	5.8	269	23.1	23.1	0.4			
8	273	3.7	3.7	-0.2	241	6.0	5.3	2.9	264	13.1	13.0	1.4	278	19.8	19.6	-2.6	273	30.4	30.4	-1.6	266	37.8	37.7	2.6	260	18.2	17.9	3.2			
9	306	1.9	1.5	-1.1	248	5.7	5.3	2.1	260	12.2	12.0	2.2	272	20.7	20.7	-0.9	273	37.6	37.6	-1.8	266	47.3	47.2	2.9	267	23.5	23.5	1.4			
10	276	1.9	1.9	-0.2	252	6.6	6.3	2.0	257	12.7	12.4	2.9	273	23.6	23.6	-1.1	267	38.6	38.6	1.7	264	48.5	48.2	5.4	262	24.4	24.2	3.3			
11	306	2.2	1.8	-1.3	253	6.5	6.2	1.9	258	14.5	14.2	3.0	266	24.2	24.1	1.6	266	40.6	40.5	2.8	261	50.1	49.5	7.7	265	34.5	34.4	3.1			
12	266	1.4	1.4	0.1	259	7.5	7.4	1.4	258	14.4	14.1	2.9	268	25.0	25.0	0.9	257	43.1	42.0	9.7	254	47.9	46.0	13.2	260	30.9	30.4	5.3			
13	262	1.4	1.4	0.2	246	7.3	6.7	3.0	260	13.9	13.7	2.5	268	21.4	21.4	0.6	264	36.4	36.2	4.0	257	42.1	41.1	9.2	261	23.9	23.6	3.7			
14	258	2.9	2.8	0.6	253	5.7	5.4	1.7	258	11.7	11.5	2.4	276	20.3	20.2	-2.1	269	32.0	32.0	0.6	265	40.1	39.9	3.8	266	24.5	24.5	1.5			
15	261	3.9	3.9	0.6	256	5.8	5.6	1.4	260	11.6	11.4	2.1	276	20.6	20.5	-2.1	280	29.6	29.2	-5.1	270	36.5	36.5	0.1	270	25.1	25.1	-0.1			
16	275	2.2	2.2	-0.2	254	6.2	6.0	1.7	255	11.0	10.6	2.9	277	20.6	20.4	-2.6	272	31.9	31.9	-1.3	268	38.3	38.3	1.4	278	21.9	21.7	-2.9			
17	270	2.9	2.9	0.0	244	6.6	5.9	2.9	258	12.1	11.8	2.5	275	19.8	19.7	-1.6	269	28.5	28.5	0.4	274	37.3	37.2	-2.3	268	20.7	20.7	0.7			
18	288	0.6	0.6	-0.2	254	6.8	6.5	1.9	256	12.5	12.1	3.1	271	20.8	20.8	-0.2	276	36.3	36.1	-3.5	267	40.8	40.7	2.3	272	24.3	24.3	-0.9			
19	254	4.0	3.8	1.1	252	8.0	7.6	2.4	258	13.8	13.5	2.9	272	21.6	21.6	-0.7	269	35.5	35.5	0.7	265	43.9	43.7	3.7	263	23.8	23.6	2.7			
20	257	4.7	4.6	1.1	242	8.0	7.1	3.7	254	12.5	12.0	3.5	273	21.6	21.6	-1.3	267	34.0	34.0	1.7	265	43.3	43.1	3.9	274	19.7	19.7	-1.3			
21	272	3.4	3.4	-0.1	247	6.5	6.0	2.5	253	13.6	13.0	3.9	273	21.0	21.0	-1.0	262	35.5	35.2	4.9	262	47.5	47.0	6.7	272	23.7	23.7	-0.9			
22	255	3.0	2.9	0.8	253	7.0	6.7	2.0	254	13.1	12.6	3.7	270	22.2	22.2	0.0	268	34.8	34.8	1.0	266	42.6	42.5	3.2	273	21.7	21.7	-1.2			
23	262	4.3	4.3	0.6	250	5.9	5.6	2.0	258	13.0	12.7	2.7	273	20.0	20.0	-1.0	271	29.3	29.3	-0.3	263	38.0	37.7	4.5	269	20.2	20.2	0.4			
24	281	3.7	3.6	-0.7	256	5.0	4.9	1.2	252	12.0	11.4	3.8	268	19.2	19.2	0.8	263	31.4	31.2	3.7	260	39.7	39.1	6.9	268	20.2	20.2	0.7			
25	193	0.9	0.2	0.9	245	5.1	4.6	2.1	259	11.7	11.5	2.2	271	16.5	16.5	-0.2	261	27.9	27.6	4.2	259	37.4	36.7	7.1	267	18.1	18.1	0.8			
26	119	1.3	-1.1	0.6	253	5.5	5.3	1.6	257	11.7	11.4	2.6	266	19.8	19.7	1.5	267	27.9	27.9	1.4	263	31.9	31.6	4.1	267	24.9	24.9	1.4			
27	252	0.6	0.6	0.2	245	6.1	5.5	2.6	254	11.2	10.8	3.0	274	16.8	16.8	-1.1	270	26.5	26.5	-0.1	266	35.8	35.7	2.5	268	20.8	20.8	0.6			
28	17	1.0	-0.3	-1.0	245	4.5	4.1	1.9	249	9.8	9.2	3.5	276	17.1	17.0	-1.7	273	29.0	29.0	-1.6	263	38.0	37.7	4.4	272	19.4	19.4	-0.8			
29	121	1.2	-1.0	0.6	252	4.4	4.2	1.4	258	10.5	10.3	2.2	271	17.6	17.6	-0.2	288	24.5	23.3	-7.6	273	31.4	31.4	-1.6	284	24.8	24.0	-6.1			
30	270	1.2	1.2	0.0	246	6.6	6.0	2.7	260	12.0	11.8	2.1	272	18.4	18.4	-0.7	268	30.7	30.7	1.3	262	34.4	34.1	4.7	268	20.7	20.7	0.7			
31	265	3.3	3.3	0.3	249	6.1	5.7	2.2	260	12.6	12.4	2.2	278	17.7	17.5	-2.6	282	28.6	28.0	-5.9	282	37.7	36.9	-7.8	273	21.0	21.0	-1.1			

Daily Normals of Upper Air Winds (1971-2000)

GUWAHATI

APRIL

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	245	1.7	1.5	0.7	246	7.0	6.4	2.9	261	14.2	14.0	2.2	273	19.3	19.3	-0.9	271	26.4	26.4	-0.4	268	35.2	35.2	1.1	278	22.7	22.5	-3.1			
2	238	3.2	2.7	1.7	251	8.8	8.3	2.8	259	14.2	14.0	2.6	273	20.1	20.1	-1.0	271	27.6	27.6	-0.7	271	38.0	38.0	-0.5	280	18.2	17.9	-3.1			
3	249	3.4	3.2	1.2	243	7.2	6.4	3.2	260	13.9	13.7	2.4	271	18.5	18.5	-0.4	267	25.9	25.9	1.5	268	40.1	40.1	1.7	276	21.1	21.0	-2.1			
4	270	3.6	3.6	0.0	245	8.4	7.6	3.5	261	16.5	16.3	2.6	274	20.3	20.3	-1.3	273	31.7	31.7	-1.6	270	40.3	40.3	-0.1	271	18.8	18.8	-0.4			
5	219	0.6	0.4	0.5	242	6.4	5.7	3.0	261	15.0	14.8	2.3	269	18.8	18.8	0.4	273	28.0	27.9	-1.7	266	37.7	37.6	2.4	258	20.4	19.9	4.4			
6	254	2.5	2.4	0.7	248	7.6	7.1	2.8	262	13.6	13.5	1.9	271	17.8	17.8	-0.4	270	28.4	28.4	0.2	262	37.1	36.7	5.1	268	17.2	17.2	0.6			
7	62	2.4	-2.1	-1.1	246	7.2	6.6	2.9	257	14.6	14.2	3.3	272	19.3	19.3	-0.8	272	26.0	26.0	-0.9	273	34.3	34.3	-1.7	279	17.9	17.7	-2.9			
8	81	1.3	-1.3	-0.2	240	6.4	5.5	3.2	262	13.7	13.6	2.0	278	17.9	17.7	-2.6	276	26.2	26.0	-2.8	273	37.6	37.5	-2.0	269	17.8	17.8	0.4			
9	228	1.2	0.9	0.8	242	7.3	6.5	3.4	260	13.3	13.1	2.3	269	18.2	18.2	0.4	271	30.2	30.2	-0.7	269	40.1	40.1	0.9	273	26.2	26.2	-1.4			
10	278	1.5	1.5	-0.2	248	6.6	6.1	2.5	257	14.7	14.3	3.3	269	19.0	19.0	0.4	271	26.3	26.3	-0.4	268	35.7	35.7	1.4	274	25.4	25.3	-1.9			
11	265	1.1	1.1	0.1	242	7.4	6.5	3.5	260	13.4	13.2	2.4	273	17.6	17.6	-0.8	267	29.6	29.6	1.3	262	38.9	38.5	5.6	276	18.4	18.3	-2.0			
12	263	2.5	2.5	0.3	245	7.2	6.5	3.0	267	12.3	12.3	0.7	278	17.0	16.8	-2.4	272	26.0	26.0	-1.1	272	30.1	30.1	-1.3	273	19.0	19.0	-1.0			
13	253	5.7	5.4	1.7	238	6.2	5.2	3.3	263	12.4	12.3	1.6	276	15.4	15.3	-1.6	276	29.2	29.0	-3.3	269	34.3	34.3	0.6	280	20.6	20.3	-3.7			
14	254	4.3	4.1	1.2	243	6.2	5.5	2.8	258	12.8	12.5	2.6	278	15.1	15.0	-2.0	273	29.7	29.7	-1.4	265	38.9	38.8	3.3	273	21.1	21.1	-1.2			
15	244	4.1	3.7	1.8	244	8.1	7.3	3.6	262	12.0	11.9	1.6	270	18.1	18.1	0.1	263	29.1	28.9	3.6	261	36.9	36.5	5.7	270	15.3	15.3	-0.1			
16	226	2.9	2.1	2.0	247	7.5	6.9	3.0	266	13.2	13.2	1.0	271	15.3	15.3	-0.2	261	27.1	26.8	4.2	260	36.5	35.9	6.4	265	18.1	18.0	1.5			
17	252	2.9	2.8	0.9	246	7.1	6.5	2.9	259	14.2	13.9	2.7	268	15.9	15.9	0.5	266	26.3	26.2	1.8	263	34.1	33.9	4.0	264	19.3	19.2	1.9			
18	231	1.3	1.0	0.8	238	5.5	4.7	2.9	261	13.9	13.7	2.1	269	16.7	16.7	0.4	265	25.1	25.0	2.4	261	30.9	30.6	4.6	266	14.3	14.3	1.1			
19	54	2.2	-1.8	-1.3	227	5.0	3.7	3.4	255	11.6	11.2	2.9	268	14.5	14.5	0.6	265	26.0	25.9	2.4	262	30.2	29.9	4.2	281	11.9	11.7	-2.2			
20	202	1.1	0.4	1.0	234	5.3	4.3	3.1	262	10.9	10.8	1.5	272	12.8	12.8	-0.4	263	24.2	24.0	3.1	267	31.4	31.3	1.9	277	11.6	11.5	-1.5			
21	54	0.9	-0.7	-0.5	238	4.6	3.9	2.4	263	11.1	11.0	1.4	276	13.6	13.5	-1.4	270	25.6	25.6	0.1	259	31.8	31.2	6.2	263	13.7	13.6	1.7			
22	212	0.9	0.5	0.8	246	4.6	4.2	1.9	257	8.7	8.5	1.9	274	13.0	13.0	-0.9	269	22.2	22.2	0.5	262	29.5	29.2	4.3	274	15.9	15.9	-1.0			
23	261	1.3	1.3	0.2	240	4.8	4.2	2.4	260	11.7	11.5	2.1	274	14.2	14.2	-1.1	269	23.0	23.0	0.4	262	28.8	28.5	4.2	271	14.5	14.5	-0.2			
24	234	2.9	2.3	1.7	240	5.6	4.9	2.8	265	13.6	13.5	1.2	272	13.6	13.6	-0.5	270	20.4	20.4	0.1	264	28.5	28.4	2.8	277	14.8	14.7	-1.8			
25	150	1.6	-0.8	1.4	239	5.5	4.7	2.8	263	11.1	11.0	1.4	269	13.8	13.8	0.2	259	22.4	22.0	4.4	256	29.7	28.8	7.2	263	12.1	12.0	1.5			
26	77	2.8	-2.7	-0.6	240	4.8	4.2	2.4	259	10.4	10.2	2.0	271	12.2	12.2	-0.2	259	20.6	20.2	4.1	252	28.2	26.8	8.7	271	11.6	11.6	-0.3			
27	73	2.4	-2.3	-0.7	237	4.5	3.8	2.5	262	9.9	9.8	1.3	275	11.7	11.7	-1.0	266	20.5	20.5	1.3	263	24.5	24.3	3.0	281	12.1	11.9	-2.4			
28	101	1.6	-1.6	0.3	231	3.8	3.0	2.4	265	8.3	8.3	0.7	269	11.9	11.9	0.3	269	19.6	19.6	0.5	265	25.3	25.2	2.2	272	12.6	12.6	-0.4			
29	256	0.4	0.4	0.1	240	5.1	4.4	2.5	261	10.5	10.4	1.6	266	12.2	12.2	0.8	266	20.6	20.5	1.6	261	29.7	29.3	4.7	271	17.6	17.6	-0.4			
30	72	0.6	-0.6	-0.2	233	3.8	3.0	2.3	264	9.7	9.6	1.0	275	14.2	14.1	-1.3	272	21.6	21.6	-0.9	265	28.7	28.6	2.5	270	13.0	13.0	0.1			

Daily Normals of Upper Air Winds (1971-2000)

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GUWAHATI

MAY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	86	1.3	-1.3	-0.1	238	5.3	4.5	2.8	263	11.1	11.0	1.4	275	14.4	14.4	-1.2	274	25.2	25.1	-1.9	266	28.2	28.1	2.2	266	14.9	14.9	1.1			
2	270	0.6	0.6	0.0	238	4.9	4.2	2.6	263	8.8	8.7	1.0	269	11.2	11.2	0.1	265	19.1	19.0	1.5	255	23.3	22.5	5.9	270	9.7	9.7	0.0			
3	222	1.3	0.9	1.0	239	5.4	4.6	2.8	263	9.9	9.8	1.2	281	11.2	11.0	-2.2	273	18.5	18.5	-1.1	263	26.3	26.1	3.0	266	10.3	10.3	0.8			
4	90	0.9	-0.9	0.0	243	4.8	4.3	2.2	266	9.1	9.1	0.7	271	10.3	10.3	-0.1	269	20.8	20.8	0.3	263	26.6	26.4	3.2	267	11.9	11.9	0.7			
5	153	0.4	-0.2	0.4	237	4.5	3.8	2.5	263	9.2	9.1	1.1	269	11.5	11.5	0.2	269	21.8	21.8	0.5	266	27.3	27.2	1.9	264	9.9	9.8	1.0			
6	281	1.0	1.0	-0.2	241	4.3	3.8	2.1	261	9.1	9.0	1.5	273	12.0	12.0	-0.6	264	22.2	22.1	2.3	262	26.0	25.7	3.8	264	12.1	12.0	1.3			
7	115	1.4	-1.3	0.6	232	2.9	2.3	1.8	263	7.0	6.9	0.9	270	9.8	9.8	0.0	266	19.6	19.5	1.5	257	22.9	22.3	5.2	258	8.5	8.3	1.8			
8	302	0.9	0.8	-0.5	239	4.8	4.1	2.5	269	9.5	9.5	0.2	267	10.9	10.9	0.5	263	20.2	20.1	2.4	252	28.0	26.7	8.5	274	9.7	9.7	-0.6			
9	252	1.3	1.2	0.4	231	5.3	4.1	3.3	256	9.7	9.4	2.4	279	10.5	10.4	-1.6	269	19.7	19.7	0.4	258	26.4	25.8	5.6	279	13.0	12.8	-2.1			
10	305	2.9	2.4	-1.7	252	4.7	4.5	1.5	256	7.6	7.4	1.8	271	9.6	9.6	-0.2	272	18.2	18.2	-0.6	261	25.1	24.8	3.9	256	8.8	8.5	2.1			
11	256	0.4	0.4	0.1	240	6.2	5.4	3.1	256	10.2	9.9	2.4	271	11.8	11.8	-0.3	260	22.2	21.9	3.7	257	20.7	20.2	4.7	265	8.9	8.9	0.8			
12	278	1.4	1.4	-0.2	231	4.8	3.7	3.0	261	9.7	9.6	1.5	263	9.8	9.7	1.2	258	19.4	19.0	4.1	256	23.9	23.2	5.8	252	7.1	6.7	2.2			
13	219	0.6	0.4	0.5	248	3.1	2.9	1.2	255	8.1	7.8	2.1	260	8.3	8.2	1.4	266	17.6	17.6	1.2	261	22.5	22.2	3.6	269	8.7	8.7	0.2			
14	90	0.3	-0.3	0.0	245	3.5	3.2	1.5	256	6.8	6.6	1.6	266	9.7	9.7	0.7	254	18.1	17.4	4.9	254	19.1	18.4	5.3	270	9.9	9.9	0.0			
15	117	0.2	-0.2	0.1	236	3.6	3.0	2.0	259	7.2	7.1	1.4	268	9.3	9.3	0.3	253	16.1	15.4	4.8	256	19.4	18.8	4.6	265	4.4	4.4	0.4			
16	69	2.5	-2.3	-0.9	237	4.6	3.9	2.5	256	9.3	9.0	2.3	264	10.1	10.0	1.1	258	17.3	16.9	3.6	255	20.3	19.6	5.1	245	6.1	5.5	2.6			
17	188	2.1	0.3	2.1	238	4.9	4.2	2.6	266	9.3	9.3	0.6	264	10.8	10.7	1.2	253	20.6	19.7	5.9	255	23.6	22.8	5.9	272	7.6	7.6	-0.3			
18	90	0.5	-0.5	0.0	240	4.2	3.6	2.1	261	9.3	9.2	1.4	264	11.0	10.9	1.2	255	19.7	19.0	5.1	251	22.0	20.8	7.3	252	6.3	6.0	2.0			
19	94	4.8	-4.8	0.3	236	2.9	2.4	1.6	255	7.1	6.9	1.8	262	11.4	11.3	1.6	256	17.2	16.7	4.1	251	23.0	21.7	7.6	278	11.7	11.6	-1.6			
20	76	1.6	-1.6	-0.4	237	3.1	2.6	1.7	255	6.5	6.3	1.7	263	9.1	9.0	1.1	261	17.4	17.2	2.8	260	19.8	19.5	3.5	280	5.3	5.2	-0.9			
21	126	1.4	-1.1	0.8	243	4.0	3.6	1.8	264	6.2	6.2	0.6	258	7.8	7.6	1.6	252	18.2	17.4	5.5	252	20.6	19.5	6.5	242	9.2	8.1	4.3			
22	347	0.9	0.2	-0.9	251	3.9	3.7	1.3	260	7.0	6.9	1.2	256	9.3	9.0	2.2	250	17.8	16.7	6.1	253	20.7	19.8	6.1	240	6.0	5.2	3.0			
23	193	0.9	0.2	0.9	236	4.0	3.3	2.2	259	6.5	6.4	1.3	258	9.4	9.2	2.0	246	17.3	15.8	7.0	249	22.5	20.9	8.2	230	5.4	4.1	3.5			
24	45	0.1	-0.1	-0.1	241	3.5	3.1	1.7	263	5.4	5.4	0.7	263	7.9	7.8	1.0	248	16.2	15.0	6.0	249	21.7	20.3	7.6	230	4.5	3.5	2.9			
25	263	0.8	0.8	0.1	239	3.1	2.7	1.6	249	4.7	4.4	1.7	257	7.7	7.5	1.7	251	15.1	14.3	4.9	246	20.5	18.7	8.5	237	5.6	4.7	3.0			
26	135	0.3	-0.2	0.2	241	3.8	3.3	1.8	243	4.6	4.1	2.1	254	5.8	5.6	1.6	252	12.9	12.3	4.0	244	14.4	12.9	6.3	242	1.7	1.5	0.8			
27	251	2.1	2.0	0.7	246	4.5	4.1	1.8	254	7.1	6.8	1.9	262	6.4	6.3	0.9	255	14.9	14.4	3.8	249	20.7	19.3	7.5	314	3.5	2.5	-2.4			
28	76	0.8	-0.8	-0.2	234	4.3	3.5	2.5	258	7.6	7.4	1.6	253	7.2	6.9	2.1	264	15.3	15.2	1.6	249	18.0	16.8	6.6	360	0.7	0.0	-0.7			
29	90	1.3	-1.3	0.0	234	4.1	3.3	2.4	259	6.2	6.1	1.2	246	6.4	5.9	2.6	251	12.9	12.2	4.2	246	15.1	13.8	6.1	191	1.0	0.2	1.0			
30	262	0.7	0.7	0.1	252	4.7	4.5	1.5	265	6.3	6.3	0.6	265	7.2	7.2	0.6	257	13.0	12.7	2.9	246	13.2	12.1	5.3	207	3.6	1.6	3.2			
31	292	1.6	1.5	-0.6	247	4.3	4.0	1.7	257	5.9	5.8	1.3	263	6.6	6.6	0.8	260	15.4	15.2	2.7	253	13.9	13.3	4.0	196	3.3	0.9	3.2			

Daily Normals of Upper Air Winds (1971-2000)

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GUWAHATI

JUNE

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	242	1.7	1.5	0.8	240	3.6	3.1	1.8	260	5.2	5.1	0.9	264	5.8	5.8	0.6	263	11.3	11.2	1.3	251	11.9	11.3	3.8	101	1.0	-1.0	0.2			
2	239	1.2	1.0	0.6	237	3.7	3.1	2.0	265	7.1	7.1	0.6	263	8.4	8.3	1.0	250	10.6	10.0	3.6	250	12.4	11.6	4.3	247	0.8	0.7	0.3			
3	257	1.3	1.3	0.3	228	3.9	2.9	2.6	264	5.8	5.8	0.6	264	6.4	6.4	0.7	261	11.3	11.2	1.7	237	13.5	11.3	7.3	254	2.9	2.8	0.8			
4	248	0.5	0.5	0.2	235	3.5	2.9	2.0	247	4.6	4.2	1.8	257	5.8	5.7	1.3	257	11.2	10.9	2.6	244	12.4	11.1	5.5	163	1.7	-0.5	1.6			
5	266	1.6	1.6	0.1	236	3.6	3.0	2.0	260	6.2	6.1	1.1	259	7.5	7.4	1.4	248	10.6	9.9	3.9	253	11.6	11.1	3.4	13	1.7	-0.4	-1.7			
6	256	2.1	2.0	0.5	233	4.6	3.7	2.8	256	6.9	6.7	1.7	256	9.2	8.9	2.3	255	10.1	9.8	2.6	262	11.2	11.1	1.5	59	3.3	-2.8	-1.7			
7	248	0.5	0.5	0.2	227	2.3	1.7	1.6	254	5.1	4.9	1.4	253	5.4	5.2	1.6	257	9.1	8.9	2.0	252	9.4	8.9	2.9	225	0.3	0.2	0.2			
8	129	0.6	-0.5	0.4	243	3.4	3.0	1.5	249	4.0	3.7	1.4	259	5.3	5.2	1.0	256	7.0	6.8	1.7	270	6.4	6.4	0.0	48	3.0	-2.2	-2.0			
9	207	0.7	0.3	0.6	232	4.1	3.2	2.5	254	4.6	4.4	1.3	259	4.8	4.7	0.9	249	6.8	6.4	2.4	259	8.0	7.9	1.5	57	3.3	-2.8	-1.8			
10	189	1.2	0.2	1.2	225	3.8	2.7	2.7	243	4.2	3.8	1.9	251	5.5	5.2	1.8	258	8.5	8.3	1.7	255	8.6	8.3	2.3	2	2.7	-0.1	-2.7			
11	95	2.1	-2.1	0.2	246	3.4	3.1	1.4	244	3.9	3.5	1.7	252	4.6	4.4	1.4	268	5.6	5.6	0.2	245	6.6	6.0	2.8	69	3.6	-3.4	-1.3			
12	193	1.8	0.4	1.8	236	4.3	3.6	2.4	242	5.0	4.4	2.3	245	3.8	3.4	1.6	256	6.4	6.2	1.6	255	5.6	5.4	1.4	75	5.4	-5.2	-1.4			
13	259	1.5	1.5	0.3	240	3.4	2.9	1.7	235	4.5	3.7	2.6	238	4.5	3.8	2.4	253	5.9	5.6	1.7	271	4.5	4.5	-0.1	66	3.5	-3.2	-1.4			
14	256	0.4	0.4	0.1	237	3.0	2.5	1.6	233	3.8	3.0	2.3	239	4.3	3.7	2.2	263	4.8	4.8	0.6	258	3.8	3.7	0.8	56	4.6	-3.8	-2.6			
15	253	1.4	1.3	0.4	233	3.9	3.1	2.3	240	4.8	4.1	2.4	247	5.4	5.0	2.1	261	5.3	5.2	0.8	230	4.0	3.1	2.6	50	6.0	-4.6	-3.9			
16	304	0.4	0.3	-0.2	225	2.8	2.0	2.0	223	3.5	2.4	2.6	237	4.3	3.6	2.3	271	6.2	6.2	-0.1	251	6.5	6.1	2.1	40	4.5	-2.9	-3.4			
17	100	1.1	-1.1	0.2	230	2.5	1.9	1.6	224	2.8	1.9	2.0	213	4.9	2.7	4.1	258	4.8	4.7	1.0	260	4.8	4.7	0.8	53	4.9	-3.9	-2.9			
18	27	0.2	-0.1	-0.2	229	1.8	1.4	1.2	230	3.4	2.6	2.2	222	3.8	2.5	2.8	259	3.6	3.5	0.7	268	3.5	3.5	0.1	47	6.4	-4.7	-4.4			
19	233	0.5	0.4	0.3	231	1.3	1.0	0.8	227	3.5	2.6	2.4	227	4.4	3.2	3.0	252	2.8	2.7	0.9	238	2.5	2.1	1.3	66	6.6	-6.0	-2.7			
20	240	2.4	2.1	1.2	232	2.8	2.2	1.7	227	4.0	2.9	2.7	240	5.2	4.5	2.6	246	3.2	2.9	1.3	262	2.8	2.8	0.4	61	6.8	-5.9	-3.3			
21	270	1.4	1.4	0.0	238	2.8	2.4	1.5	228	3.8	2.8	2.5	228	3.6	2.7	2.4	276	2.7	2.7	-0.3	302	1.3	1.1	-0.7	70	10.0	-9.4	-3.4			
22	167	0.9	-0.2	0.9	219	2.7	1.7	2.1	202	3.2	1.2	3.0	243	2.7	2.4	1.2	257	2.7	2.6	0.6	294	1.7	1.6	-0.7	61	8.1	-7.1	-4.0			
23	35	1.2	-0.7	-1.0	229	2.3	1.7	1.5	206	3.0	1.3	2.7	195	2.4	0.6	2.3	247	2.6	2.4	1.0	15	2.0	-0.5	-1.9	64	10.7	-9.6	-4.7			
24	97	0.8	-0.8	0.1	233	2.0	1.6	1.2	202	2.9	1.1	2.7	205	3.1	1.3	2.8	238	1.3	1.1	0.7	288	0.9	0.9	-0.3	73	8.7	-8.3	-2.6			
25	63	1.1	-1.0	-0.5	227	2.2	1.6	1.5	206	3.0	1.3	2.7	124	1.8	-1.5	1.0	326	1.4	0.8	-1.2	347	3.2	0.7	-3.1	65	11.5	-10.4	-4.9			
26	61	1.0	-0.9	-0.5	187	1.6	0.2	1.6	182	3.3	0.1	3.3	172	2.2	-0.3	2.2	222	1.2	0.8	0.9	300	2.2	1.9	-1.1	58	12.6	-10.7	-6.6			
27	234	0.9	0.7	0.5	218	3.3	2.0	2.6	207	3.6	1.6	3.2	165	1.6	-0.4	1.5	90	1.0	-1.0	0.0	43	1.9	-1.3	-1.4	62	12.3	-10.9	-5.7			
28	293	0.8	0.7	-0.3	218	2.9	1.8	2.3	198	3.5	1.1	3.3	198	2.9	0.9	2.8	197	1.0	0.3	1.0	34	2.9	-1.6	-2.4	66	11.6	-10.6	-4.7			
29	248	1.6	1.5	0.6	203	2.5	1.0	2.3	212	3.9	2.1	3.3	184	2.9	0.2	2.9	74	0.7	-0.7	-0.2	37	3.0	-1.8	-2.4	66	14.5	-13.3	-5.8			
30	253	1.7	1.6	0.5	212	3.6	1.9	3.0	223	5.4	3.7	3.9	236	2.7	2.2	1.5	112	1.8	-1.7	0.7	58	2.5	-2.1	-1.3	68	14.1	-13.1	-5.2			

Daily Normals of Upper Air Winds (1971-2000)

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GUWAHATI

JULY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	252	1.3	1.2	0.4	241	3.3	2.9	1.6	226	4.0	2.9	2.8	228	2.5	1.9	1.7	229	0.9	0.7	0.6	68	2.9	-2.7	-1.1	76	13.8	-13.4	-3.3			
2	225	0.6	0.4	0.4	240	3.8	3.3	1.9	229	4.1	3.1	2.7	232	3.7	2.9	2.3	198	0.9	0.3	0.9	63	4.4	-3.9	-2.0	79	13.2	-12.9	-2.6			
3	265	2.5	2.5	0.2	245	3.8	3.4	1.6	234	4.6	3.7	2.7	216	2.9	1.7	2.3	153	0.4	-0.2	0.4	65	4.4	-4.0	-1.9	77	13.6	-13.2	-3.1			
4	264	3.0	3.0	0.3	241	3.9	3.4	1.9	240	4.3	3.7	2.1	229	2.3	1.7	1.5	99	1.2	-1.2	0.2	52	3.6	-2.8	-2.2	78	14.4	-14.1	-3.0			
5	281	2.0	2.0	-0.4	218	2.4	1.5	1.9	219	3.3	2.1	2.6	219	2.6	1.6	2.0	98	2.7	-2.7	0.4	72	5.8	-5.5	-1.8	78	16.4	-16.0	-3.5			
6	270	0.9	0.9	0.0	233	3.4	2.7	2.0	219	3.2	2.0	2.5	149	1.7	-0.9	1.5	95	2.3	-2.3	0.2	61	6.5	-5.7	-3.2	81	17.1	-16.9	-2.7			
7	270	2.0	2.0	0.0	221	2.8	1.8	2.1	198	3.3	1.0	3.1	205	1.4	0.6	1.3	80	3.4	-3.3	-0.6	66	7.4	-6.8	-3.0	81	14.7	-14.5	-2.4			
8	267	3.5	3.5	0.2	235	2.4	2.0	1.4	198	3.2	1.0	3.0	194	0.8	0.2	0.8	80	1.7	-1.7	-0.3	71	5.3	-5.0	-1.7	70	10.7	-10.0	-3.7			
9	238	0.9	0.8	0.5	241	2.9	2.5	1.4	202	2.9	1.1	2.7	187	1.6	0.2	1.6	82	2.7	-2.7	-0.4	66	5.5	-5.0	-2.2	61	13.8	-12.1	-6.6			
10	299	1.0	0.9	-0.5	227	2.1	1.5	1.4	180	2.2	0.0	2.2	123	2.0	-1.7	1.1	79	3.2	-3.1	-0.6	89	4.6	-4.6	-0.1	73	13.1	-12.5	-3.9			
11	94	1.6	-1.6	0.1	205	1.4	0.6	1.3	190	2.8	0.5	2.8	180	1.7	0.0	1.7	85	2.5	-2.5	-0.2	71	5.6	-5.3	-1.8	61	15.6	-13.7	-7.5			
12	90	0.4	-0.4	0.0	235	3.2	2.6	1.8	211	2.9	1.5	2.5	217	1.0	0.6	0.8	21	0.9	-0.3	-0.8	46	3.7	-2.7	-2.6	64	14.0	-12.6	-6.1			
13	180	0.4	0.0	0.4	214	2.5	1.4	2.1	200	3.7	1.3	3.5	202	1.1	0.4	1.0	28	1.9	-0.9	-1.7	52	6.1	-4.8	-3.8	69	13.2	-12.3	-4.7			
14	297	0.4	0.4	-0.2	230	2.3	1.8	1.5	201	2.8	1.0	2.6	190	2.2	0.4	2.2	25	2.1	-0.9	-1.9	51	4.8	-3.7	-3.0	62	16.4	-14.5	-7.7			
15	261	2.0	2.0	0.3	243	3.0	2.7	1.4	213	3.1	1.7	2.6	198	1.6	0.5	1.5	41	2.9	-1.9	-2.2	43	7.5	-5.1	-5.5	67	18.0	-16.6	-6.9			
16	284	3.4	3.3	-0.8	227	3.4	2.5	2.3	228	2.4	1.8	1.6	188	0.7	0.1	0.7	60	3.6	-3.1	-1.8	56	4.7	-3.9	-2.6	64	15.5	-13.9	-6.8			
17	310	0.8	0.6	-0.5	221	2.3	1.5	1.7	206	3.7	1.6	3.3	148	1.5	-0.8	1.3	54	2.6	-2.1	-1.5	47	6.8	-5.0	-4.6	75	16.5	-15.9	-4.3			
18	225	0.1	0.1	0.1	233	2.6	2.1	1.6	201	3.1	1.1	2.9	143	1.0	-0.6	0.8	27	3.3	-1.5	-2.9	36	6.4	-3.8	-5.2	69	15.9	-14.8	-5.8			
19	90	0.2	-0.2	0.0	220	2.6	1.7	2.0	214	3.0	1.7	2.5	141	1.3	-0.8	1.0	49	4.0	-3.0	-2.6	54	7.3	-5.9	-4.3	70	16.1	-15.1	-5.5			
20	203	1.3	0.5	1.2	212	1.9	1.0	1.6	164	2.5	-0.7	2.4	117	1.6	-1.4	0.7	41	3.7	-2.4	-2.8	51	5.8	-4.5	-3.7	73	17.0	-16.3	-5.0			
21	74	0.7	-0.7	-0.2	202	2.2	0.8	2.0	168	3.4	-0.7	3.3	145	1.2	-0.7	1.0	56	4.6	-3.8	-2.6	61	9.6	-8.4	-4.6	73	18.3	-17.5	-5.2			
22	257	2.6	2.5	0.6	235	2.9	2.4	1.7	200	3.2	1.1	3.0	101	2.0	-2.0	0.4	68	5.6	-5.2	-2.1	71	8.0	-7.6	-2.6	75	19.5	-18.8	-5.0			
23	312	1.2	0.9	-0.8	231	2.6	2.0	1.6	192	2.5	0.5	2.4	111	0.9	-0.8	0.3	63	5.3	-4.7	-2.4	67	9.6	-8.8	-3.8	69	19.9	-18.6	-7.2			
24	267	1.8	1.8	0.1	251	3.1	2.9	1.0	209	2.5	1.2	2.2	208	1.5	0.7	1.3	65	4.7	-4.3	-2.0	49	6.9	-5.2	-4.5	66	16.7	-15.2	-6.9			
25	257	2.2	2.1	0.5	238	4.1	3.5	2.2	219	2.8	1.8	2.2	156	1.0	-0.4	0.9	55	5.2	-4.3	-3.0	61	9.4	-8.2	-4.5	76	18.8	-18.3	-4.5			
26	79	2.5	-2.5	-0.5	225	3.0	2.1	2.1	208	2.6	1.2	2.3	188	1.4	0.2	1.4	70	4.5	-4.2	-1.5	73	7.3	-7.0	-2.2	65	16.7	-15.1	-7.2			
27	59	0.6	-0.5	-0.3	234	2.7	2.2	1.6	207	2.5	1.1	2.2	169	1.5	-0.3	1.5	73	5.5	-5.3	-1.6	70	10.0	-9.4	-3.5	74	18.3	-17.6	-4.9			
28	352	0.7	0.1	-0.7	239	2.7	2.3	1.4	207	2.9	1.3	2.6	145	1.6	-0.9	1.3	69	6.1	-5.7	-2.2	70	9.6	-9.0	-3.2	76	17.9	-17.4	-4.4			
29	294	1.0	0.9	-0.4	225	2.5	1.8	1.8	233	2.1	1.7	1.3	117	1.6	-1.4	0.7	63	7.0	-6.2	-3.2	60	10.3	-8.9	-5.2	70	25.1	-23.5	-8.7			
30	162	0.6	-0.2	0.6	247	2.3	2.1	0.9	177	1.8	-0.1	1.8	70	1.2	-1.1	-0.4	53	5.5	-4.4	-3.3	50	11.8	-9.0	-7.6	70	20.4	-19.2	-6.8			
31	255	1.6	1.5	0.4	200	1.5	0.5	1.4	177	1.8	-0.1	1.8	120	1.6	-1.4	0.8	47	5.0	-3.6	-3.4	57	8.2	-6.8	-4.5	76	18.8	-18.2	-4.7			

Daily Normals of Upper Air Winds (1971-2000)

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GUWAHATI

AUGUST

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	315	0.7	0.5	-0.5	203	1.5	0.6	1.4	169	1.6	-0.3	1.6	131	1.8	-1.4	1.2	42	5.9	-4.0	-4.4	49	9.8	-7.4	-6.4	74	17.1	-16.5	-4.6			
2	315	0.3	0.2	-0.2	119	2.1	-1.8	1.0	120	3.0	-2.6	1.5	126	3.6	-2.9	2.1	79	4.4	-4.3	-0.8	55	7.1	-5.8	-4.1	75	17.7	-17.1	-4.7			
3	250	1.5	1.4	0.5	149	2.3	-1.2	2.0	155	3.1	-1.3	2.8	126	3.6	-2.9	2.1	72	2.5	-2.4	-0.8	40	5.4	-3.5	-4.1	72	15.8	-15.0	-5.0			
4	354	1.0	0.1	-1.0	169	1.5	-0.3	1.5	147	3.7	-2.0	3.1	54	1.9	-1.5	-1.1	59	3.9	-3.3	-2.0	46	5.6	-4.0	-3.9	74	14.3	-13.7	-4.0			
5	90	0.4	-0.4	0.0	186	2.0	0.2	2.0	130	1.6	-1.2	1.0	108	2.2	-2.1	0.7	77	5.1	-5.0	-1.2	54	9.4	-7.6	-5.6	75	16.7	-16.2	-4.2			
6	225	0.6	0.4	0.4	211	1.2	0.6	1.0	137	2.1	-1.4	1.5	93	3.5	-3.5	0.2	69	6.5	-6.1	-2.3	60	9.4	-8.1	-4.7	72	19.4	-18.5	-5.9			
7	315	1.4	1.0	-1.0	119	1.3	-1.1	0.6	143	2.6	-1.6	2.1	110	3.3	-3.1	1.1	72	6.0	-5.7	-1.8	59	9.0	-7.7	-4.7	73	16.0	-15.3	-4.8			
8	333	0.4	0.2	-0.4	172	0.7	-0.1	0.7	138	2.5	-1.7	1.9	108	2.5	-2.4	0.8	72	7.2	-6.9	-2.2	62	12.0	-10.6	-5.7	68	18.1	-16.8	-6.7			
9	262	1.5	1.5	0.2	252	1.6	1.5	0.5	189	1.9	0.3	1.9	114	2.0	-1.8	0.8	65	7.6	-6.9	-3.2	66	10.5	-9.6	-4.2	75	15.0	-14.5	-3.8			
10	270	0.8	0.8	0.0	253	1.7	1.6	0.5	183	1.9	0.1	1.9	90	1.9	-1.9	0.0	69	6.0	-5.6	-2.2	67	10.1	-9.3	-4.0	69	16.5	-15.5	-5.8			
11	304	1.1	0.9	-0.6	183	1.9	0.1	1.9	151	2.5	-1.2	2.2	150	2.0	-1.0	1.7	50	4.7	-3.6	-3.0	54	8.9	-7.2	-5.2	70	15.8	-14.8	-5.4			
12	252	1.3	1.2	0.4	169	1.5	-0.3	1.5	168	2.4	-0.5	2.3	155	1.7	-0.7	1.5	60	4.6	-4.0	-2.3	58	6.7	-5.7	-3.6	83	15.0	-14.9	-1.7			
13	270	1.3	1.3	0.0	171	1.8	-0.3	1.8	156	3.7	-1.5	3.4	158	2.4	-0.9	2.2	67	3.0	-2.8	-1.2	67	7.6	-7.0	-2.9	80	17.4	-17.2	-2.9			
14	249	1.4	1.3	0.5	207	1.6	0.7	1.4	155	2.1	-0.9	1.9	135	2.1	-1.5	1.5	90	3.1	-3.1	0.0	53	6.4	-5.1	-3.8	83	15.9	-15.8	-2.0			
15	311	1.1	0.8	-0.7	227	1.6	1.2	1.1	152	2.6	-1.2	2.3	133	2.1	-1.5	1.4	42	2.7	-1.8	-2.0	68	3.5	-3.2	-1.3	73	17.2	-16.5	-4.9			
16	270	1.7	1.7	0.0	211	2.1	1.1	1.8	204	2.2	0.9	2.0	149	1.2	-0.6	1.0	52	3.6	-2.8	-2.2	51	6.5	-5.0	-4.1	73	16.6	-15.9	-4.9			
17	54	0.9	-0.7	-0.5	225	0.8	0.6	0.6	167	2.2	-0.5	2.1	153	1.8	-0.8	1.6	62	3.4	-3.0	-1.6	67	5.2	-4.8	-2.0	76	16.3	-15.8	-4.0			
18	288	0.6	0.6	-0.2	180	0.9	0.0	0.9	160	2.0	-0.7	1.9	93	1.9	-1.9	0.1	57	3.1	-2.6	-1.7	54	5.4	-4.4	-3.2	76	13.6	-13.2	-3.2			
19	243	0.7	0.6	0.3	168	1.4	-0.3	1.4	166	2.5	-0.6	2.4	155	1.7	-0.7	1.5	61	4.5	-3.9	-2.2	64	8.1	-7.3	-3.6	68	14.9	-13.8	-5.6			
20	90	0.4	-0.4	0.0	235	1.6	1.3	0.9	188	2.1	0.3	2.1	111	1.4	-1.3	0.5	52	6.6	-5.2	-4.0	62	7.6	-6.7	-3.5	74	13.0	-12.5	-3.5			
21	225	0.6	0.4	0.4	232	2.3	1.8	1.4	188	1.4	0.2	1.4	175	1.1	-0.1	1.1	68	4.6	-4.3	-1.7	67	6.6	-6.1	-2.6	77	12.6	-12.3	-2.8			
22	262	2.2	2.2	0.3	236	2.2	1.8	1.2	185	2.3	0.2	2.3	173	2.4	-0.3	2.4	66	3.2	-2.9	-1.3	42	4.8	-3.2	-3.6	86	15.9	-15.9	-1.2			
23	287	2.1	2.0	-0.6	237	2.4	2.0	1.3	213	2.4	1.3	2.0	225	2.0	1.4	1.4	40	2.5	-1.6	-1.9	56	4.8	-4.0	-2.7	84	15.2	-15.1	-1.5			
24	254	1.9	1.8	0.5	252	3.2	3.0	1.0	221	2.1	1.4	1.6	180	1.0	0.0	1.0	51	2.2	-1.7	-1.4	68	3.5	-3.3	-1.3	73	11.9	-11.4	-3.5			
25	108	0.3	-0.3	0.1	202	1.1	0.4	1.0	150	1.6	-0.8	1.4	121	2.7	-2.3	1.4	43	3.4	-2.3	-2.5	41	4.5	-3.0	-3.4	75	13.5	-13.0	-3.5			
26	70	2.0	-1.9	-0.7	113	0.8	-0.7	0.3	146	2.3	-1.3	1.9	127	2.5	-2.0	1.5	90	3.2	-3.2	0.0	73	5.5	-5.3	-1.6	86	13.2	-13.2	-0.9			
27	76	0.8	-0.8	-0.2	162	1.6	-0.5	1.5	142	2.4	-1.5	1.9	115	1.4	-1.3	0.6	72	4.1	-3.9	-1.3	71	5.0	-4.7	-1.6	74	14.8	-14.2	-4.1			
28	315	0.6	0.4	-0.4	225	1.0	0.7	0.7	147	2.4	-1.3	2.0	151	1.8	-0.9	1.6	59	2.7	-2.3	-1.4	98	5.2	-5.2	0.7	86	14.6	-14.6	-0.9			
29	292	1.1	1.0	-0.4	256	1.2	1.2	0.3	197	2.7	0.8	2.6	170	1.1	-0.2	1.1	72	3.8	-3.6	-1.2	65	5.1	-4.6	-2.1	80	14.3	-14.1	-2.6			
30	85	1.1	-1.1	-0.1	180	1.3	0.0	1.3	159	1.4	-0.5	1.3	144	0.9	-0.5	0.7	53	3.6	-2.9	-2.2	36	4.7	-2.8	-3.8	74	11.2	-10.8	-3.1			
31	67	1.3	-1.2	-0.5	223	2.2	1.5	1.6	183	1.7	0.1	1.7	131	1.8	-1.4	1.2	52	2.9	-2.3	-1.8	43	6.2	-4.2	-4.5	74	12.6	-12.1	-3.4			

Daily Normals of Upper Air Winds (1971-2000)

GUWAHATI

SEPTEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	101	0.5	-0.5	0.1	238	3.2	2.7	1.7	202	2.4	0.9	2.2	162	2.0	-0.6	1.9	105	2.8	-2.7	0.7	73	4.7	-4.5	-1.4	79	11.4	-11.2	-2.2
2	343	1.4	0.4	-1.3	242	2.6	2.3	1.2	199	2.1	0.7	2.0	153	0.7	-0.3	0.6	58	3.9	-3.3	-2.1	70	5.5	-5.2	-1.9	86	12.7	-12.7	-0.9
3	259	1.5	1.5	0.3	243	2.7	2.4	1.2	216	2.7	1.6	2.2	203	0.8	0.3	0.7	60	1.6	-1.4	-0.8	39	2.8	-1.8	-2.2	80	10.7	-10.5	-1.9
4	267	2.0	2.0	0.1	248	2.4	2.2	0.9	197	2.4	0.7	2.3	187	1.6	0.2	1.6	77	2.2	-2.1	-0.5	43	3.4	-2.3	-2.5	83	10.3	-10.2	-1.2
5	253	1.0	1.0	0.3	259	1.6	1.6	0.3	196	2.5	0.7	2.4	170	1.7	-0.3	1.7	79	2.1	-2.1	-0.4	60	4.4	-3.8	-2.2	83	10.4	-10.3	-1.2
6	287	1.0	1.0	-0.3	233	2.0	1.6	1.2	207	2.5	1.1	2.2	180	1.9	0.0	1.9	87	2.0	-2.0	-0.1	61	2.6	-2.3	-1.3	75	10.4	-10.0	-2.7
7	307	1.0	0.8	-0.6	233	1.5	1.2	0.9	180	2.3	0.0	2.3	138	1.3	-0.9	1.0	75	2.4	-2.3	-0.6	76	3.0	-2.9	-0.7	81	11.8	-11.7	-1.8
8	310	1.6	1.2	-1.0	203	0.8	0.3	0.7	149	2.1	-1.1	1.8	212	1.3	0.7	1.1	124	1.1	-0.9	0.6	62	3.2	-2.8	-1.5	76	9.8	-9.5	-2.3
9	278	1.4	1.4	-0.2	193	1.3	0.3	1.3	176	1.3	-0.1	1.3	212	2.2	1.2	1.9	28	1.5	-0.7	-1.3	21	2.6	-0.9	-2.4	81	9.9	-9.8	-1.6
10	259	2.5	2.5	0.5	219	1.4	0.9	1.1	180	1.4	0.0	1.4	171	1.2	-0.2	1.2	14	0.4	-0.1	-0.4	346	0.8	0.2	-0.8	87	7.7	-7.7	-0.4
11	284	1.2	1.2	-0.3	243	3.3	2.9	1.5	226	3.2	2.3	2.2	235	2.1	1.7	1.2	279	1.3	1.3	-0.2	25	1.7	-0.7	-1.5	80	8.1	-8.0	-1.4
12	360	0.2	0.0	-0.2	238	4.1	3.5	2.2	235	3.3	2.7	1.9	238	1.9	1.6	1.0	261	1.9	1.9	0.3	297	2.2	2.0	-1.0	84	5.9	-5.9	-0.6
13	360	0.2	0.0	-0.2	239	4.3	3.7	2.2	221	3.3	2.2	2.5	249	3.1	2.9	1.1	273	3.7	3.7	-0.2	297	3.6	3.2	-1.6	94	7.0	-7.0	0.5
14	232	1.6	1.3	1.0	242	4.1	3.6	1.9	234	4.2	3.4	2.5	225	3.1	2.2	2.2	246	2.2	2.0	0.9	5	2.2	-0.2	-2.2	98	5.9	-5.8	0.8
15	266	1.3	1.3	0.1	246	3.7	3.4	1.5	237	3.8	3.2	2.1	248	2.7	2.5	1.0	260	2.8	2.8	0.5	270	5.2	5.2	0.0	85	3.4	-3.4	-0.3
16	121	0.6	-0.5	0.3	226	2.8	2.0	1.9	224	3.6	2.5	2.6	233	3.6	2.9	2.2	253	3.9	3.7	1.1	287	4.2	4.0	-1.2	79	4.3	-4.2	-0.8
17	243	1.1	1.0	0.5	251	3.4	3.2	1.1	231	4.1	3.2	2.6	258	5.1	5.0	1.1	261	4.7	4.6	0.7	263	5.8	5.8	0.7	72	3.6	-3.4	-1.1
18	275	3.5	3.5	-0.3	252	4.6	4.4	1.4	252	4.5	4.3	1.4	270	3.9	3.9	0.0	279	6.3	6.2	-1.0	281	7.0	6.9	-1.4	47	2.1	-1.5	-1.4
19	243	1.8	1.6	0.8	247	2.8	2.6	1.1	249	2.6	2.4	0.9	270	2.5	2.5	0.0	264	5.1	5.1	0.5	281	6.5	6.4	-1.3	101	3.2	-3.1	0.6
20	274	1.4	1.4	-0.1	245	2.6	2.4	1.1	227	1.8	1.3	1.2	247	2.6	2.4	1.0	276	5.0	5.0	-0.5	278	6.1	6.0	-0.8	74	2.2	-2.1	-0.6
21	180	0.1	0.0	0.1	237	2.4	2.0	1.3	232	2.8	2.2	1.7	252	4.0	3.8	1.2	274	4.6	4.6	-0.3	287	7.4	7.1	-2.2	81	2.6	-2.6	-0.4
22	259	1.6	1.6	0.3	242	2.7	2.4	1.3	229	3.7	2.8	2.4	248	3.1	2.9	1.2	276	4.8	4.8	-0.5	274	5.8	5.8	-0.4	99	2.6	-2.6	0.4
23	261	0.6	0.6	0.1	248	2.7	2.5	1.0	237	3.1	2.6	1.7	258	3.4	3.3	0.7	271	6.1	6.1	-0.1	271	7.7	7.7	-0.2	81	1.8	-1.8	-0.3
24	284	0.8	0.8	-0.2	239	2.7	2.3	1.4	254	3.5	3.4	1.0	249	3.4	3.2	1.2	266	6.5	6.5	0.5	270	8.2	8.2	0.0	109	2.4	-2.3	0.8
25	180	0.7	0.0	0.7	241	3.3	2.9	1.6	240	3.4	3.0	1.7	247	5.2	4.8	2.0	254	7.1	6.8	2.0	271	8.7	8.7	-0.1	56	0.7	-0.6	-0.4
26	204	1.7	0.7	1.6	251	3.7	3.5	1.2	247	4.4	4.1	1.7	255	5.9	5.7	1.5	259	7.8	7.7	1.5	256	10.9	10.6	2.6	275	2.3	2.3	-0.2
27	104	0.4	-0.4	0.1	225	2.4	1.7	1.7	240	3.9	3.4	2.0	259	4.8	4.7	0.9	260	8.4	8.3	1.5	248	8.1	7.5	3.1	71	2.1	-2.0	-0.7
28	68	1.8	-1.7	-0.7	200	1.5	0.5	1.4	220	2.6	1.7	2.0	234	4.3	3.5	2.5	257	8.0	7.8	1.8	261	10.5	10.4	1.6	207	2.5	1.1	2.2
29	291	1.7	1.6	-0.6	242	3.0	2.6	1.4	233	3.5	2.8	2.1	248	6.3	5.8	2.4	249	9.6	9.0	3.4	254	12.0	11.5	3.3	270	1.1	1.1	0.0
30	259	1.5	1.5	0.3	240	4.3	3.7	2.1	234	3.9	3.2	2.3	247	7.0	6.5	2.7	247	10.0	9.2	4.0	255	9.0	8.7	2.3	221	3.0	2.0	2.3

Daily Normals of Upper Air Winds (1971-2000)

GUWAHATI

OCTOBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	117	0.7	-0.6	0.3	237	3.0	2.5	1.6	235	3.2	2.6	1.8	247	5.7	5.3	2.2	259	8.6	8.4	1.6	257	8.6	8.4	2.0	162	1.9	-0.6	1.8
2	135	1.0	-0.7	0.7	232	2.9	2.3	1.8	245	2.9	2.6	1.2	263	6.7	6.7	0.8	261	11.4	11.3	1.8	256	11.1	10.8	2.6	169	1.0	-0.2	1.0
3	130	0.8	-0.6	0.5	250	3.0	2.8	1.0	244	4.6	4.1	2.0	255	6.9	6.7	1.8	257	11.5	11.2	2.5	256	11.9	11.6	2.8	212	2.2	1.2	1.9
4	180	0.2	0.0	0.2	245	2.9	2.6	1.2	247	3.8	3.5	1.5	252	7.0	6.6	2.2	259	12.4	12.2	2.4	259	14.0	13.8	2.6	246	6.2	5.7	2.5
5	180	0.1	0.0	0.1	232	2.8	2.2	1.7	237	3.8	3.2	2.1	259	5.3	5.2	1.0	251	9.7	9.2	3.1	248	10.7	9.9	4.0	241	2.3	2.0	1.1
6	259	0.5	0.5	0.1	237	2.7	2.3	1.5	239	3.1	2.7	1.6	254	7.7	7.4	2.1	259	11.4	11.2	2.2	254	13.0	12.5	3.7	257	3.7	3.6	0.8
7	292	0.5	0.5	-0.2	237	3.3	2.8	1.8	237	3.1	2.6	1.7	256	8.0	7.8	1.9	259	12.8	12.6	2.4	253	13.6	13.0	4.0	216	1.9	1.1	1.5
8	243	1.1	1.0	0.5	244	2.8	2.5	1.2	237	3.0	2.5	1.6	260	7.1	7.0	1.2	256	12.9	12.5	3.2	262	16.1	15.9	2.3	263	5.6	5.6	0.7
9	270	2.1	2.1	0.0	253	3.0	2.9	0.9	255	3.0	2.9	0.8	258	8.8	8.6	1.9	258	13.6	13.3	2.9	255	14.8	14.3	3.9	254	5.7	5.5	1.6
10	266	1.5	1.5	0.1	243	2.7	2.4	1.2	238	3.8	3.2	2.0	258	10.4	10.2	2.2	261	16.2	16.0	2.4	265	14.8	14.7	1.4	262	5.3	5.3	0.7
11	354	1.0	0.1	-1.0	225	1.4	1.0	1.0	243	4.6	4.1	2.1	264	11.5	11.4	1.1	260	16.5	16.2	3.0	260	16.5	16.2	3.0	235	5.6	4.6	3.2
12	238	0.9	0.8	0.5	234	2.7	2.2	1.6	256	4.5	4.4	1.1	253	11.2	10.7	3.2	259	17.8	17.5	3.5	256	20.0	19.4	4.8	260	6.5	6.4	1.1
13	233	0.5	0.4	0.3	240	1.4	1.2	0.7	248	4.8	4.4	1.8	256	11.1	10.8	2.7	256	16.9	16.4	4.0	258	20.0	19.5	4.3	260	7.7	7.6	1.3
14	243	0.7	0.6	0.3	240	1.4	1.2	0.7	238	3.6	3.1	1.9	258	9.8	9.6	2.1	251	18.1	17.1	6.0	248	21.3	19.8	7.8	250	10.6	9.9	3.7
15	55	1.2	-1.0	-0.7	230	1.6	1.2	1.0	254	3.2	3.1	0.9	250	9.8	9.2	3.4	251	17.9	17.0	5.7	254	20.5	19.8	5.5	231	9.1	7.1	5.7
16	62	1.7	-1.5	-0.8	246	2.7	2.5	1.1	255	4.6	4.4	1.2	261	10.4	10.3	1.6	259	18.8	18.4	3.7	250	18.7	17.5	6.5	277	13.1	13.0	-1.6
17	105	1.1	-1.1	0.3	235	2.1	1.7	1.2	254	4.7	4.5	1.3	260	10.7	10.5	1.8	260	19.7	19.4	3.5	258	22.3	21.8	4.8	255	8.0	7.7	2.0
18	16	0.7	-0.2	-0.7	226	2.9	2.1	2.0	251	4.9	4.6	1.6	260	11.5	11.3	2.0	259	19.8	19.4	3.8	255	22.2	21.5	5.7	257	8.4	8.2	1.9
19	68	1.1	-1.0	-0.4	229	2.0	1.5	1.3	249	4.8	4.5	1.7	258	12.8	12.5	2.7	262	20.6	20.4	3.0	259	22.5	22.1	4.3	256	9.3	9.0	2.3
20	63	0.7	-0.6	-0.3	242	2.1	1.9	1.0	257	4.4	4.3	1.0	255	11.6	11.2	2.9	256	20.1	19.5	5.0	256	23.7	23.0	5.7	249	11.6	10.8	4.2
21	90	1.0	-1.0	0.0	225	2.1	1.5	1.5	255	3.5	3.4	0.9	264	13.3	13.2	1.4	254	23.1	22.2	6.4	246	21.8	20.0	8.7	264	11.8	11.7	1.2
22	297	0.2	0.2	-0.1	235	1.9	1.6	1.1	265	4.4	4.4	0.4	265	12.0	11.9	1.1	257	22.0	21.4	5.0	262	23.1	22.8	3.4	250	12.2	11.5	4.1
23	21	1.4	-0.5	-1.3	218	1.6	1.0	1.3	247	5.1	4.7	2.0	260	13.1	12.9	2.3	256	21.7	21.1	5.2	258	29.8	29.1	6.2	255	11.0	10.6	2.8
24	77	0.9	-0.9	-0.2	250	2.0	1.9	0.7	259	4.7	4.6	0.9	264	14.3	14.2	1.5	263	23.3	23.1	2.7	261	28.0	27.7	4.2	250	11.1	10.4	3.8
25	45	1.3	-0.9	-0.9	237	2.4	2.0	1.3	254	5.1	4.9	1.4	259	14.4	14.1	2.7	257	26.8	26.1	6.1	261	31.4	31.0	4.9	262	20.3	20.1	2.7
26	86	1.4	-1.4	-0.1	211	1.2	0.6	1.0	254	4.4	4.2	1.2	260	14.3	14.1	2.6	255	25.0	24.1	6.5	259	27.2	26.7	5.0	266	13.9	13.9	1.0
27	85	2.5	-2.5	-0.2	180	1.4	0.0	1.4	245	2.3	2.1	1.0	266	12.6	12.6	0.8	264	25.2	25.1	2.7	264	30.0	29.8	3.0	267	15.5	15.5	0.8
28	92	2.8	-2.8	0.1	115	1.4	-1.3	0.6	249	2.2	2.1	0.8	264	12.4	12.3	1.4	261	25.5	25.2	3.9	256	29.3	28.4	7.2	262	16.3	16.1	2.4
29	87	2.0	-2.0	-0.1	217	1.0	0.6	0.8	238	3.2	2.7	1.7	266	13.7	13.7	0.9	256	27.4	26.6	6.6	254	27.1	26.0	7.6	272	13.7	13.7	-0.4
30	79	1.6	-1.6	-0.3	163	1.7	-0.5	1.6	247	3.4	3.1	1.3	267	12.1	12.1	0.7	257	26.2	25.5	5.9	259	32.7	32.0	6.5	262	13.6	13.5	1.8
31	75	1.6	-1.5	-0.4	132	1.2	-0.9	0.8	227	2.3	1.7	1.6	262	11.0	10.9	1.6	259	24.8	24.4	4.7	264	32.9	32.7	3.6	270	13.5	13.5	0.1

Daily Normals of Upper Air Winds (1971-2000)

131

GUWAHATI

NOVEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	65	1.4	-1.3	-0.6	207	0.7	0.3	0.6	252	4.5	4.3	1.4	263	15.4	15.3	2.0	256	29.5	28.7	6.9	257	35.8	34.9	7.8	261	14.9	14.7	2.4			
2	84	0.9	-0.9	-0.1	243	0.4	0.4	0.2	245	5.0	4.5	2.1	270	16.3	16.3	-0.1	266	28.2	28.1	1.8	263	34.6	34.4	4.0	263	15.2	15.1	1.9			
3	86	4.0	-4.0	-0.3	151	1.0	-0.5	0.9	256	5.6	5.4	1.3	268	16.3	16.3	0.5	268	29.8	29.8	1.1	263	39.0	38.7	4.9	269	17.1	17.1	0.3			
4	87	2.1	-2.1	-0.1	193	1.3	0.3	1.3	249	3.9	3.6	1.4	261	15.4	15.2	2.3	261	31.4	31.0	4.7	260	36.3	35.8	6.0	255	15.7	15.2	4.1			
5	81	1.8	-1.8	-0.3	197	1.7	0.5	1.6	256	4.2	4.1	1.0	262	14.5	14.4	1.9	262	29.9	29.6	4.0	264	34.2	34.0	3.7	261	15.6	15.4	2.4			
6	76	1.2	-1.2	-0.3	198	0.9	0.3	0.9	272	3.3	3.3	-0.1	265	14.4	14.3	1.2	263	28.8	28.6	3.7	261	34.2	33.7	5.6	277	18.8	18.7	-2.3			
7	79	1.5	-1.5	-0.3	197	1.0	0.3	1.0	247	3.9	3.6	1.5	273	17.9	17.9	-0.9	267	33.5	33.5	1.7	266	35.9	35.8	2.5	263	17.4	17.3	2.1			
8	77	1.8	-1.8	-0.4	165	1.6	-0.4	1.5	240	2.2	1.9	1.1	268	15.0	15.0	0.6	269	31.7	31.7	0.8	272	37.1	37.1	-1.2	276	17.7	17.6	-1.9			
9	98	1.5	-1.5	0.2	144	1.7	-1.0	1.4	234	1.7	1.4	1.0	266	15.7	15.7	1.1	266	29.5	29.4	2.3	268	35.0	35.0	1.0	270	12.0	12.0	-0.1			
10	75	3.0	-2.9	-0.8	153	1.8	-0.8	1.6	255	3.0	2.9	0.8	265	15.2	15.1	1.3	266	31.9	31.8	2.5	266	31.5	31.4	2.1	280	14.1	13.9	-2.4			
11	110	2.0	-1.9	0.7	186	1.0	0.1	1.0	246	4.2	3.8	1.7	262	14.4	14.3	1.9	261	33.0	32.6	4.9	260	36.9	36.3	6.7	260	14.8	14.6	2.5			
12	60	0.8	-0.7	-0.4	170	1.1	-0.2	1.1	247	4.0	3.7	1.6	270	15.9	15.9	-0.1	268	28.1	28.1	1.2	264	33.6	33.4	3.8	272	15.7	15.7	-0.5			
13	108	0.6	-0.6	0.2	211	0.6	0.3	0.5	250	4.6	4.3	1.6	274	16.9	16.9	-1.2	277	28.5	28.3	-3.3	272	34.8	34.8	-1.0	270	18.3	18.3	0.0			
14	101	2.1	-2.1	0.4	214	0.7	0.4	0.6	246	3.0	2.7	1.2	276	14.1	14.0	-1.4	276	32.9	32.7	-3.7	268	36.5	36.5	1.2	277	18.8	18.7	-2.3			
15	77	2.6	-2.5	-0.6	108	0.9	-0.9	0.3	243	2.5	2.2	1.1	279	15.3	15.1	-2.3	274	30.6	30.5	-2.3	267	35.7	35.6	1.9	285	17.1	16.5	-4.5			
16	90	1.6	-1.6	0.0	193	0.9	0.2	0.9	253	2.7	2.6	0.8	269	16.5	16.5	0.2	270	35.5	35.5	-0.1	264	39.5	39.3	4.4	269	20.1	20.1	0.3			
17	80	3.5	-3.4	-0.6	122	1.9	-1.6	1.0	243	2.8	2.5	1.3	270	16.1	16.1	0.1	269	31.0	31.0	0.3	260	37.0	36.5	6.2	262	16.0	15.9	2.1			
18	107	1.0	-1.0	0.3	138	1.5	-1.0	1.1	256	3.7	3.6	0.9	268	19.4	19.4	0.6	261	35.7	35.2	5.7	252	40.1	38.1	12.5	254	20.8	20.0	5.6			
19	346	0.4	0.1	-0.4	207	1.3	0.6	1.2	256	6.5	6.3	1.6	268	21.2	21.2	0.7	259	32.8	32.1	6.5	253	37.2	35.7	10.6	258	18.3	17.9	3.9			
20	111	0.9	-0.8	0.3	173	0.8	-0.1	0.8	250	4.5	4.2	1.5	264	17.9	17.8	1.9	256	32.8	31.8	8.2	254	37.3	35.8	10.3	258	19.4	19.0	4.0			
21	80	2.3	-2.3	-0.4	180	0.3	0.0	0.3	270	3.7	3.7	0.0	273	18.8	18.8	-0.9	259	35.1	34.4	6.9	256	39.7	38.4	9.9	274	20.5	20.4	-1.6			
22	80	3.6	-3.5	-0.6	186	0.9	0.1	0.9	254	4.7	4.5	1.3	266	17.7	17.7	1.3	255	32.0	30.9	8.5	251	38.1	36.0	12.6	254	17.1	16.4	4.7			
23	92	2.4	-2.4	0.1	203	1.3	0.5	1.2	263	4.9	4.9	0.6	266	19.7	19.7	1.4	258	33.1	32.4	6.7	252	37.9	36.1	11.5	255	22.6	21.8	5.8			
24	139	0.9	-0.6	0.7	217	1.5	0.9	1.2	261	5.1	5.0	0.8	266	19.2	19.2	1.2	257	33.6	32.7	7.8	248	39.1	36.1	14.9	258	18.9	18.5	3.9			
25	67	2.3	-2.1	-0.9	169	0.5	-0.1	0.5	267	4.2	4.2	0.2	270	18.8	18.8	0.0	268	33.3	33.3	0.9	263	34.0	33.8	3.9	265	16.8	16.7	1.5			
26	78	1.9	-1.9	-0.4	169	0.5	-0.1	0.5	255	5.2	5.0	1.3	271	20.2	20.2	-0.4	264	33.0	32.8	3.4	261	39.4	38.9	6.2	268	23.2	23.2	0.9			
27	63	0.9	-0.8	-0.4	228	1.2	0.9	0.8	259	5.1	5.0	1.0	273	19.2	19.2	-0.9	268	34.3	34.3	1.2	261	38.9	38.4	6.3	265	20.7	20.6	1.9			
28	59	2.3	-2.0	-1.2	163	1.0	-0.3	1.0	252	6.0	5.7	1.8	263	21.7	21.5	2.6	261	30.9	30.5	5.1	254	35.9	34.6	9.6	266	19.5	19.4	1.5			
29	83	2.4	-2.4	-0.3	149	0.6	-0.3	0.5	259	4.9	4.8	0.9	266	17.9	17.8	1.4	264	36.3	36.1	3.8	261	40.5	40.1	6.0	277	19.7	19.6	-2.3			
30	81	2.4	-2.4	-0.4	149	1.2	-0.6	1.0	253	4.7	4.5	1.4	268	21.8	21.8	0.6	262	34.6	34.2	5.0	256	47.5	46.0	11.7	265	23.0	22.9	2.1			

Daily Normals of Upper Air Winds (1971-2000)

GUWAHATI

DECEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	81	1.3	-1.3	-0.2	151	1.0	-0.5	0.9	264	4.5	4.5	0.5	270	20.1	20.1	0.0	266	34.2	34.1	2.1	258	40.4	39.5	8.5	263	17.8	17.7	2.1			
2	63	1.8	-1.6	-0.8	153	0.7	-0.3	0.6	274	5.2	5.2	-0.4	274	20.6	20.6	-1.3	268	35.7	35.7	1.0	260	36.5	36.0	6.2	263	20.0	19.9	2.4			
3	83	3.1	-3.1	-0.4	176	1.3	-0.1	1.3	269	5.5	5.5	0.1	272	19.3	19.3	-0.7	271	36.8	36.8	-0.6	261	41.0	40.4	6.7	268	21.7	21.7	0.9			
4	85	2.1	-2.1	-0.2	212	1.3	0.7	1.1	258	5.9	5.8	1.2	274	19.5	19.5	-1.2	271	35.4	35.4	-0.4	265	39.9	39.7	3.5	262	27.8	27.5	3.8			
5	78	2.5	-2.4	-0.5	189	0.6	0.1	0.6	274	5.1	5.1	-0.4	273	19.8	19.8	-1.1	266	37.6	37.5	2.5	262	45.1	44.7	6.3	266	26.1	26.1	1.6			
6	77	3.7	-3.6	-0.8	209	1.0	0.5	0.9	265	4.3	4.3	0.4	276	20.3	20.2	-2.1	268	36.2	36.2	1.3	258	40.0	39.1	8.4	266	23.5	23.5	1.5			
7	92	2.5	-2.5	0.1	141	1.4	-0.9	1.1	278	4.2	4.2	-0.6	269	17.4	17.4	0.3	264	36.7	36.5	3.8	257	42.6	41.5	9.5	262	25.7	25.5	3.5			
8	75	1.6	-1.5	-0.4	153	0.9	-0.4	0.8	261	4.5	4.4	0.7	274	23.2	23.1	-1.6	272	36.6	36.6	-1.1	269	40.7	40.7	0.5	271	30.5	30.5	-0.6			
9	59	1.2	-1.0	-0.6	140	0.8	-0.5	0.6	263	4.3	4.3	0.5	271	21.2	21.2	-0.5	272	32.6	32.6	-1.2	266	39.1	39.0	2.4	261	27.1	26.8	4.2			
10	82	2.1	-2.1	-0.3	186	1.0	0.1	1.0	260	6.8	6.7	1.2	269	22.6	22.6	0.2	266	37.9	37.8	2.4	259	47.1	46.2	9.1	262	27.6	27.4	3.7			
11	86	1.3	-1.3	-0.1	193	0.9	0.2	0.9	260	5.6	5.5	1.0	273	22.7	22.7	-1.1	268	41.3	41.3	1.2	265	47.4	47.2	4.4	275	25.5	25.4	-2.2			
12	79	1.5	-1.5	-0.3	189	1.2	0.2	1.2	261	3.9	3.9	0.6	272	22.7	22.7	-0.7	268	42.3	42.3	1.8	265	51.9	51.7	4.4	271	32.3	32.3	-0.3			
13	73	1.7	-1.6	-0.5	174	0.9	-0.1	0.9	264	4.9	4.9	0.5	274	24.5	24.4	-1.9	267	39.7	39.7	1.9	267	43.5	43.5	1.9	267	29.2	29.2	1.6			
14	90	2.3	-2.3	0.0	238	0.9	0.8	0.5	262	5.8	5.7	0.8	275	23.9	23.8	-2.0	268	41.5	41.5	1.4	260	52.5	51.7	8.9	268	23.3	23.3	0.8			
15	90	1.6	-1.6	0.0	169	1.0	-0.2	1.0	264	4.5	4.5	0.5	270	20.8	20.8	-0.1	266	36.1	36.0	2.4	256	42.4	41.2	10.0	270	22.9	22.9	0.0			
16	83	3.4	-3.4	-0.4	207	0.9	0.4	0.8	270	4.7	4.7	0.0	279	24.2	23.9	-3.8	273	38.7	38.6	-2.1	268	45.5	45.5	1.7	267	28.7	28.7	1.6			
17	85	3.3	-3.3	-0.3	170	1.1	-0.2	1.1	272	6.0	6.0	-0.2	270	21.1	21.1	-0.1	268	36.7	36.7	1.5	262	42.6	42.2	5.9	266	28.7	28.6	2.1			
18	97	1.6	-1.6	0.2	180	1.3	0.0	1.3	264	5.6	5.6	0.6	266	19.7	19.7	1.4	265	39.7	39.6	3.2	259	45.5	44.7	8.6	273	27.1	27.1	-1.4			
19	87	1.9	-1.9	-0.1	200	1.2	0.4	1.1	263	6.3	6.2	0.8	275	20.5	20.4	-1.7	271	39.3	39.3	-0.9	265	47.4	47.2	4.3	265	32.0	31.9	2.7			
20	65	2.1	-1.9	-0.9	197	1.0	0.3	1.0	272	5.9	5.9	-0.2	271	22.8	22.8	-0.3	272	41.9	41.9	-1.2	259	49.1	48.2	9.2	264	39.7	39.5	4.3			
21	80	2.3	-2.3	-0.4	198	1.3	0.4	1.2	272	6.6	6.6	-0.2	276	22.0	21.9	-2.3	273	41.5	41.5	-2.0	263	48.6	48.2	6.0	265	32.2	32.1	2.8			
22	77	3.5	-3.4	-0.8	142	1.1	-0.7	0.9	256	3.7	3.6	0.9	273	19.9	19.9	-1.0	271	37.9	37.9	-0.9	266	48.5	48.4	3.2	268	25.1	25.1	0.8			
23	82	2.2	-2.2	-0.3	212	1.9	1.0	1.6	261	7.0	6.9	1.1	266	21.0	21.0	1.3	270	44.5	44.5	-0.2	263	54.4	54.0	6.9	263	33.8	33.5	4.2			
24	87	1.9	-1.9	-0.1	180	0.7	0.0	0.7	266	5.4	5.4	0.4	271	19.6	19.6	-0.2	267	37.1	37.1	1.7	260	44.4	43.8	7.4	266	33.1	33.0	2.3			
25	75	2.7	-2.6	-0.7	202	0.5	0.2	0.5	265	5.2	5.2	0.5	274	22.0	21.9	-1.5	273	41.2	41.1	-2.4	267	51.2	51.1	3.1	275	30.9	30.8	-2.6			
26	61	2.1	-1.8	-1.0	216	0.9	0.5	0.7	257	5.5	5.4	1.2	269	21.0	21.0	0.4	270	41.6	41.6	-0.3	268	53.4	53.4	1.5	272	44.1	44.1	-1.3			
27	50	1.7	-1.3	-1.1	228	1.3	1.0	0.9	252	5.6	5.3	1.7	273	24.9	24.9	-1.2	272	39.2	39.2	-1.4	269	44.7	44.7	0.9	273	32.1	32.1	-1.7			
28	56	0.7	-0.6	-0.4	245	1.9	1.7	0.8	272	7.3	7.3	-0.2	270	24.0	24.0	0.2	269	39.9	39.9	1.0	265	48.9	48.7	4.2	269	32.0	32.0	0.6			
29	34	0.7	-0.4	-0.6	210	1.4	0.7	1.2	263	7.0	6.9	0.9	266	25.4	25.3	1.6	271	45.7	45.7	-0.9	263	54.9	54.4	7.1	260	25.5	25.1	4.4			
30	63	1.3	-1.2	-0.6	220	1.7	1.1	1.3	264	5.8	5.8	0.6	270	24.7	24.7	0.2	272	46.2	46.2	-1.5	267	47.4	47.3	2.5	268	30.8	30.8	1.2			
31	70	1.2	-1.1	-0.4	225	1.3	0.9	0.9	257	4.4	4.3	1.0	273	26.2	26.2	-1.2	268	40.7	40.7	1.1	269	45.2	45.2	0.9	263	27.5	27.3	3.4			

Daily Normals of Upper Air Winds (1971-2000)

GWALIOR

JANUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	323	2.5	1.5	-2.0	293	4.6	4.2	-1.8	288	9.7	9.2	-3.0	282	20.0	19.6	-4.2	281	46.1	45.2	-9.1	261	39.0	38.5	6.2	261	30.9	30.6	4.6
2	45	0.3	-0.2	-0.2	291	3.6	3.4	-1.3	276	10.3	10.3	-1.0	274	21.0	21.0	-1.4	277	39.2	38.9	-5.1	262	43.1	42.7	5.8	237	16.0	13.4	8.7
3	338	2.4	0.9	-2.2	301	3.7	3.2	-1.9	278	8.8	8.7	-1.2	278	21.6	21.4	-3.1	280	36.4	35.8	-6.5	282	48.1	47.1	-9.7	266	28.8	28.7	1.9
4	343	2.4	0.7	-2.3	283	3.2	3.1	-0.7	279	9.7	9.6	-1.6	262	20.8	20.6	3.0	268	40.5	40.5	1.3	301	55.0	47.0	-28.6	346	9.4	2.2	-9.1
5	13	1.8	-0.4	-1.8	296	3.0	2.7	-1.3	278	10.4	10.3	-1.4	276	19.4	19.3	-2.1	274	40.9	40.8	-2.5	282	43.0	42.1	-8.7	—	—	—	—
6	306	2.4	1.9	-1.4	280	3.9	3.8	-0.7	276	11.4	11.3	-1.2	280	19.6	19.3	-3.4	275	40.9	40.7	-3.5	276	51.0	50.7	-5.7	278	17.5	17.3	-2.5
7	336	1.7	0.7	-1.6	274	2.8	2.8	-0.2	257	7.3	7.1	1.7	268	17.4	17.4	0.6	257	36.1	35.2	7.9	275	52.1	51.9	-4.2	277	32.0	31.7	-4.0
8	342	2.3	0.7	-2.2	291	3.3	3.1	-1.2	285	8.2	7.9	-2.1	275	19.3	19.2	-1.6	275	31.8	31.7	-2.6	266	39.0	38.9	2.4	264	33.8	33.6	3.8
9	347	2.2	0.5	-2.1	284	4.6	4.5	-1.1	277	11.3	11.2	-1.4	273	24.0	24.0	-1.1	270	37.8	37.8	-0.2	262	42.5	42.1	5.8	268	34.7	34.7	1.0
10	47	1.6	-1.2	-1.1	279	3.2	3.2	-0.5	269	10.2	10.2	0.2	261	19.1	18.9	2.9	264	38.7	38.5	3.8	251	38.9	36.7	12.8	275	20.2	20.1	-1.8
11	153	0.7	-0.3	0.6	217	2.1	1.3	1.7	265	12.0	12.0	1.0	263	26.3	26.1	3.3	256	24.0	23.3	5.6	252	21.0	20.0	6.5	267	21.0	21.0	1.1
12	307	1.5	1.2	-0.9	276	2.8	2.8	-0.3	271	11.1	11.1	-0.1	269	21.0	21.0	0.4	268	46.3	46.3	2.0	240	50.9	44.1	25.4	294	18.0	16.4	-7.3
13	338	2.4	0.9	-2.2	290	3.3	3.1	-1.1	277	10.8	10.7	-1.3	277	26.3	26.1	-3.0	263	35.9	35.7	4.1	264	46.2	46.0	4.7	259	22.6	22.2	4.3
14	27	0.7	-0.3	-0.6	266	2.9	2.9	0.2	266	11.1	11.1	0.7	266	23.1	23.0	1.8	263	40.5	40.2	4.8	257	56.7	55.4	12.3	256	57.0	55.3	13.8
15	349	1.0	0.2	-1.0	274	4.0	4.0	-0.3	271	13.4	13.4	-0.3	267	18.1	18.1	0.8	268	43.9	43.9	1.8	269	49.5	49.5	0.8	265	38.0	37.9	3.3
16	325	3.2	1.8	-2.6	285	4.2	4.1	-1.1	273	11.8	11.8	-0.7	271	23.6	23.6	-0.6	272	46.7	46.7	-1.7	274	47.0	46.9	-3.0	254	17.7	17.0	4.9
17	320	4.5	2.9	-3.5	301	5.6	4.8	-2.9	274	9.1	9.1	-0.7	279	18.9	18.6	-3.1	277	38.6	38.3	-5.0	267	54.1	54.0	2.6	268	29.9	29.9	1.3
18	315	2.8	2.0	-2.0	286	4.6	4.4	-1.3	272	10.5	10.5	-0.3	272	20.4	20.4	-0.7	282	48.5	47.5	-9.9	268	53.8	53.8	2.3	273	24.0	24.0	-1.3
19	311	4.4	3.3	-2.9	295	4.1	3.7	-1.7	277	10.9	10.8	-1.4	278	22.1	21.9	-3.0	271	39.4	39.4	-1.0	266	42.7	42.6	3.0	260	30.6	30.1	5.3
20	307	2.5	2.0	-1.5	292	4.0	3.7	-1.5	281	11.4	11.2	-2.1	281	25.4	24.9	-4.9	267	42.1	42.0	2.5	251	52.3	49.5	16.8	275	32.6	32.5	-3.0
21	18	1.6	-0.5	-1.5	279	2.6	2.6	-0.4	271	10.5	10.5	-0.2	279	21.4	21.1	-3.3	272	37.6	37.6	-1.0	259	45.4	44.6	8.3	268	26.1	26.1	0.8
22	333	1.6	0.7	-1.4	274	4.4	4.4	-0.3	272	9.6	9.6	-0.3	272	22.4	22.4	-0.9	266	36.6	36.5	2.4	249	37.4	35.0	13.1	279	26.0	25.7	-4.1
23	320	3.5	2.3	-2.7	295	5.9	5.3	-2.5	279	10.4	10.3	-1.7	274	22.5	22.4	-1.7	264	38.2	38.0	4.1	264	42.0	41.8	4.4	274	22.6	22.6	-1.5
24	322	4.1	2.5	-3.2	295	5.2	4.7	-2.2	278	12.0	11.9	-1.7	271	24.7	24.7	-0.3	277	36.8	36.6	-4.2	276	28.6	28.4	-3.2	245	23.8	21.5	10.2
25	325	2.9	1.7	-2.4	285	5.6	5.4	-1.4	273	11.5	11.5	-0.7	269	23.2	23.2	0.5	262	35.9	35.6	4.9	262	42.8	42.3	6.3	255	34.6	33.4	8.9
26	327	3.7	2.0	-3.1	285	3.9	3.8	-1.0	277	9.5	9.4	-1.1	269	20.9	20.9	0.4	270	42.5	42.5	0.3	263	37.9	37.6	4.8	264	33.2	33.0	3.4
27	324	1.7	1.0	-1.4	276	3.6	3.6	-0.4	277	8.8	8.7	-1.0	278	21.5	21.3	-3.0	259	37.3	36.7	6.9	270	44.2	44.2	-0.3	268	32.4	32.4	1.3
28	329	3.7	1.9	-3.2	298	4.3	3.8	-2.0	280	10.0	9.9	-1.7	279	24.6	24.3	-4.0	274	40.0	39.9	-2.6	285	25.0	24.1	-6.5	—	—	—	—
29	337	2.3	0.9	-2.1	291	4.2	3.9	-1.5	285	10.2	9.8	-2.7	282	22.3	21.8	-4.6	283	39.1	38.1	-8.7	271	28.9	28.9	-0.7	278	23.9	23.7	-3.3
30	313	3.3	2.4	-2.2	278	7.7	7.6	-1.1	274	11.0	11.0	-0.8	277	24.6	24.4	-3.2	276	34.6	34.4	-3.7	272	40.0	40.0	-1.5	268	33.0	33.0	1.4
31	339	2.6	0.9	-2.4	277	4.3	4.3	-0.5	273	9.9	9.9	-0.5	280	21.9	21.6	-3.9	276	41.8	41.6	-4.1	279	52.9	52.3	-8.2	—	—	—	—

Daily Normals of Upper Air Winds (1971-2000)

134

GWALIOR

FEBRUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	349	3.1	0.6	-3.0	300	4.3	3.7	-2.1	287	9.4	9.0	-2.8	276	23.8	23.7	-2.3	262	37.1	36.8	5.0	266	36.7	36.6	2.7	281	29.9	29.4	-5.7			
2	9	2.5	-0.4	-2.5	296	4.1	3.7	-1.8	286	9.2	8.8	-2.6	279	23.6	23.3	-3.6	277	35.0	34.7	-4.2	268	44.5	44.5	1.5	284	29.7	28.8	-7.2			
3	351	2.6	0.4	-2.6	294	3.6	3.3	-1.5	278	9.1	9.0	-1.3	279	22.1	21.9	-3.3	272	36.7	36.7	-1.4	284	48.7	47.2	-11.8	260	12.0	11.8	2.1			
4	304	0.7	0.6	-0.4	280	4.5	4.4	-0.8	281	9.9	9.7	-1.8	277	21.1	20.9	-2.6	282	33.9	33.1	-7.2	277	49.1	48.7	-6.4	274	54.9	54.8	-3.8			
5	323	4.0	2.4	-3.2	299	4.1	3.6	-2.0	278	9.2	9.1	-1.2	277	19.3	19.1	-2.5	272	32.7	32.7	-1.4	274	44.7	44.6	-3.3	265	26.0	25.9	2.3			
6	314	3.3	2.4	-2.3	293	4.8	4.4	-1.9	283	10.7	10.4	-2.4	282	18.9	18.5	-3.8	285	33.1	32.0	-8.3	280	42.8	42.2	-7.4	266	47.0	46.9	3.3			
7	339	1.9	0.7	-1.8	297	2.7	2.4	-1.2	286	11.5	11.0	-3.2	281	21.8	21.4	-4.1	273	34.5	34.5	-1.8	276	40.4	40.2	-4.2	274	32.4	32.3	-2.0			
8	285	3.1	3.0	-0.8	287	3.7	3.5	-1.1	278	11.3	11.2	-1.6	279	21.3	21.0	-3.5	281	35.3	34.7	-6.7	278	41.1	40.7	-5.6	281	47.1	46.3	-8.6			
9	306	5.8	4.7	-3.4	308	2.9	2.3	-1.8	272	9.7	9.7	-0.3	283	19.7	19.2	-4.3	287	43.2	41.4	-12.5	285	57.7	55.6	-15.3	285	54.1	52.3	-13.8			
10	338	1.8	0.7	-1.7	290	3.8	3.6	-1.3	282	10.0	9.8	-2.0	273	19.0	19.0	-0.9	281	37.1	36.4	-7.2	278	33.8	33.5	-4.6	313	18.5	13.6	-12.6			
11	337	2.5	1.0	-2.3	282	3.5	3.4	-0.7	292	11.3	10.5	-4.2	282	20.9	20.4	-4.4	284	42.0	40.8	-9.9	288	48.1	45.8	-14.6	279	41.3	40.8	-6.7			
12	317	2.1	1.4	-1.5	286	3.6	3.5	-1.0	278	9.7	9.6	-1.4	277	20.4	20.2	-2.5	279	37.8	37.3	-6.2	267	44.1	44.0	2.4	273	31.4	31.3	-1.8			
13	305	2.9	2.4	-1.7	258	3.0	2.9	0.6	271	9.9	9.9	-0.2	263	23.6	23.4	2.8	271	41.0	41.0	-0.8	265	44.7	44.5	4.1	261	38.2	37.8	5.8			
14	315	2.1	1.5	-1.5	257	4.3	4.2	1.0	260	8.4	8.3	1.5	262	23.5	23.3	3.1	262	43.2	42.8	6.0	260	55.6	54.8	9.5	260	31.6	31.1	5.7			
15	307	2.1	1.7	-1.3	266	2.6	2.6	0.2	259	10.8	10.6	2.0	266	18.9	18.9	1.3	270	35.9	35.9	0.1	270	38.8	38.8	0.1	251	44.0	41.5	14.6			
16	348	1.9	0.4	-1.9	274	3.0	3.0	-0.2	267	12.6	12.6	0.6	272	24.8	24.8	-0.7	270	45.1	45.1	0.2	263	58.6	58.1	7.4	—	—	—	—			
17	324	3.4	2.0	-2.8	279	3.7	3.7	-0.6	266	10.7	10.7	0.8	271	24.5	24.5	-0.4	274	40.1	40.0	-3.0	263	47.9	47.5	6.0	268	21.0	21.0	0.7			
18	304	2.5	2.1	-1.4	284	3.2	3.1	-0.8	266	8.9	8.9	0.7	268	23.6	23.6	1.0	265	40.3	40.1	3.8	271	48.0	48.0	-0.6	262	22.6	22.4	3.3			
19	326	2.2	1.2	-1.8	277	3.3	3.3	-0.4	275	10.1	10.1	-0.9	277	24.7	24.5	-2.9	272	48.1	48.1	-1.6	277	58.1	57.7	-6.9	263	63.0	62.5	7.7			
20	4	1.3	-0.1	-1.3	272	3.2	3.2	-0.1	271	10.1	10.1	-0.2	275	22.8	22.7	-2.0	271	44.6	44.6	-0.7	257	49.3	48.1	10.7	—	—	—	—			
21	333	2.5	1.1	-2.2	297	4.5	4.0	-2.0	276	9.9	9.8	-1.0	278	23.1	22.9	-3.3	281	42.9	42.1	-8.0	275	54.1	53.9	-4.9	268	33.1	33.1	0.9			
22	319	3.3	2.2	-2.5	285	5.0	4.8	-1.3	276	11.8	11.7	-1.3	281	22.8	22.4	-4.4	276	37.4	37.2	-3.9	289	50.7	47.8	-16.8	297	65.0	57.9	-29.5			
23	355	2.3	0.2	-2.3	292	3.1	2.9	-1.2	283	12.2	11.9	-2.8	276	20.7	20.6	-2.3	288	36.1	34.3	-11.1	277	50.5	50.1	-6.0	268	50.0	50.0	1.7			
24	322	2.9	1.8	-2.3	271	5.3	5.3	-0.1	262	11.4	11.3	1.5	280	20.6	20.3	-3.6	282	36.1	35.4	-7.3	284	48.2	46.8	-11.7	284	43.1	41.8	-10.7			
25	334	3.7	1.6	-3.3	269	6.0	6.0	0.1	268	12.7	12.7	0.4	274	20.8	20.7	-1.6	279	35.8	35.3	-5.9	284	49.7	48.3	-11.7	276	23.7	23.6	-2.6			
26	315	3.7	2.6	-2.6	286	4.8	4.6	-1.3	281	12.7	12.5	-2.4	276	23.5	23.4	-2.5	269	33.3	33.3	0.3	287	40.6	38.7	-12.2	255	20.0	19.3	5.2			
27	3	2.1	-0.1	-2.1	266	4.2	4.2	0.3	268	11.2	11.2	0.4	275	20.2	20.1	-1.6	273	33.0	32.9	-2.0	270	56.2	56.2	0.4	285	23.0	22.2	-6.0			
28	324	4.3	2.5	-3.5	284	5.9	5.7	-1.4	267	12.0	12.0	0.6	273	23.0	23.0	-1.2	272	38.5	38.5	-1.4	264	59.8	59.5	6.4	257	33.9	33.0	7.8			
29	350	2.9	0.5	-2.9	275	5.9	5.9	-0.5	273	12.7	12.7	-0.6	288	22.3	21.2	-7.0	248	18.0	16.7	6.7	251	55.0	52.0	17.9	—	—	—	—			

Daily Normals of Upper Air Winds (1971-2000)

135

GWALIOR

MARCH

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	333	4.2	1.9	-3.7	291	4.0	3.7	-1.4	271	11.0	11.0	-0.1	271	20.4	20.4	-0.4	269	39.2	39.2	0.5	271	55.6	55.6	-0.8	279	44.0	43.5	-6.9			
2	315	3.7	2.6	-2.6	283	4.8	4.7	-1.1	274	10.2	10.2	-0.7	282	20.9	20.5	-4.2	277	40.3	40.0	-5.1	273	49.6	49.5	-2.5	268	42.9	42.9	1.5			
3	332	3.2	1.5	-2.8	301	5.4	4.6	-2.8	288	10.1	9.6	-3.1	285	21.9	21.1	-5.7	273	30.2	30.2	-1.6	266	36.4	36.3	2.6	263	41.6	41.2	5.4			
4	344	3.6	1.0	-3.5	294	4.2	3.8	-1.7	271	11.9	11.9	-0.2	274	21.3	21.2	-1.6	273	36.3	36.3	-1.8	263	45.5	45.2	5.5	258	25.8	25.2	5.4			
5	313	3.5	2.6	-2.4	275	4.5	4.5	-0.4	265	11.3	11.3	0.9	271	21.8	21.8	-0.2	269	37.6	37.6	0.7	266	45.1	45.0	3.4	262	30.0	29.7	4.2			
6	336	3.7	1.5	-3.4	289	3.9	3.7	-1.3	271	12.3	12.3	-0.3	267	22.1	22.1	1.3	279	33.2	32.8	-5.3	271	32.0	32.0	-0.5	277	43.3	43.0	-5.1			
7	324	4.4	2.6	-3.6	279	4.6	4.5	-0.7	276	11.0	10.9	-1.2	276	21.6	21.5	-2.4	274	36.4	36.3	-2.3	262	41.6	41.2	6.0	266	44.4	44.3	3.0			
8	320	5.0	3.2	-3.8	283	4.1	4.0	-0.9	266	9.4	9.4	0.6	262	20.5	20.3	2.8	277	32.4	32.2	-3.7	276	41.8	41.5	-4.7	272	39.8	39.8	-1.5			
9	338	3.8	1.4	-3.5	279	2.6	2.6	-0.4	263	9.3	9.2	1.2	268	20.2	20.2	0.7	278	32.1	31.8	-4.2	268	39.6	39.6	1.7	270	29.5	29.5	0.2			
10	7	3.9	-0.5	-3.9	331	1.8	0.9	-1.6	266	9.5	9.5	0.7	269	21.8	21.8	0.4	280	26.8	26.4	-4.6	276	31.1	30.9	-3.1	269	18.6	18.6	0.2			
11	294	2.4	2.2	-1.0	284	4.0	3.9	-1.0	268	8.4	8.4	0.3	267	19.8	19.8	1.0	270	35.7	35.7	0.3	271	40.7	40.7	-0.6	273	43.6	43.5	-2.4			
12	324	3.2	1.9	-2.6	306	4.3	3.5	-2.5	269	10.3	10.3	0.1	275	19.1	19.0	-1.7	276	36.3	36.1	-4.1	276	32.4	32.2	-3.3	266	39.4	39.3	3.0			
13	335	3.8	1.6	-3.4	290	4.0	3.8	-1.4	284	10.8	10.5	-2.6	278	19.6	19.4	-2.6	276	32.5	32.3	-3.6	277	40.7	40.4	-4.7	279	26.8	26.5	-4.3			
14	309	4.4	3.4	-2.8	286	5.3	5.1	-1.5	271	11.0	11.0	-0.1	281	21.3	20.9	-4.2	289	33.2	31.3	-11.0	290	43.0	40.3	-15.0	266	26.4	26.3	1.8			
15	328	4.5	2.4	-3.8	299	4.9	4.3	-2.4	274	11.5	11.5	-0.8	279	21.4	21.1	-3.3	280	36.9	36.3	-6.7	281	38.2	37.5	-7.2	288	25.0	23.8	-7.8			
16	319	5.2	3.4	-3.9	293	5.1	4.7	-2.0	271	12.0	12.0	-0.3	273	24.1	24.1	-1.3	270	35.9	35.9	-0.1	261	36.9	36.5	5.6	275	30.0	29.9	-2.4			
17	297	3.9	3.5	-1.8	276	5.1	5.1	-0.5	269	11.7	11.7	0.3	269	20.0	20.0	0.2	278	35.4	35.1	-4.7	280	39.1	38.5	-7.1	304	25.8	21.4	-14.5			
18	304	5.0	4.1	-2.8	276	5.6	5.6	-0.6	268	11.5	11.5	0.5	271	19.4	19.4	-0.2	276	30.1	29.9	-3.3	265	36.8	36.7	3.2	277	31.9	31.6	-4.1			
19	316	4.7	3.3	-3.4	290	5.4	5.1	-1.9	266	11.1	11.1	0.7	269	22.4	22.4	0.2	267	36.7	36.6	2.0	270	41.0	41.0	-0.2	266	37.3	37.2	2.3			
20	332	2.7	1.3	-2.4	287	5.0	4.8	-1.5	274	11.3	11.3	-0.8	273	20.6	20.6	-0.9	277	34.9	34.6	-4.4	266	38.9	38.8	2.5	255	34.3	33.2	8.7			
21	302	3.6	3.1	-1.9	277	5.6	5.6	-0.7	266	11.4	11.4	0.8	271	22.8	22.8	-0.4	277	36.5	36.2	-4.5	273	43.0	42.9	-2.2	267	28.5	28.5	1.4			
22	344	4.3	1.2	-4.1	290	5.2	4.9	-1.8	263	9.5	9.4	1.2	271	23.6	23.6	-0.5	276	37.1	36.9	-3.9	285	33.1	32.0	-8.4	274	25.0	24.9	-1.7			
23	324	2.7	1.6	-2.2	297	4.7	4.2	-2.1	269	11.1	11.1	0.2	275	21.1	21.0	-1.7	275	33.7	33.6	-2.9	269	30.4	30.4	0.7	274	28.7	28.6	-2.1			
24	324	4.3	2.5	-3.5	287	3.8	3.6	-1.1	268	9.9	9.9	0.3	268	21.1	21.1	0.9	268	33.8	33.8	1.0	261	39.3	38.8	6.3	265	28.1	28.0	2.5			
25	314	4.3	3.1	-3.0	298	4.9	4.3	-2.3	261	9.9	9.8	1.5	271	18.2	18.2	-0.2	270	39.7	39.7	0.0	281	43.5	42.7	-8.3	275	42.3	42.2	-3.5			
26	334	6.2	2.7	-5.6	302	4.5	3.8	-2.4	267	7.9	7.9	0.4	278	19.9	19.7	-2.7	283	32.7	31.9	-7.2	282	39.3	38.5	-8.1	278	16.2	16.0	-2.2			
27	329	4.5	2.3	-3.9	303	4.8	4.0	-2.6	280	9.0	8.9	-1.5	278	17.2	17.0	-2.5	284	35.9	34.8	-8.8	280	50.8	50.0	-8.8	262	18.5	18.3	2.7			
28	337	3.9	1.5	-3.6	297	5.1	4.6	-2.3	273	8.3	8.3	-0.5	269	19.6	19.6	0.5	267	38.9	38.8	2.1	270	54.4	54.4	0.2	311	21.0	15.8	-13.8			
29	327	3.5	1.9	-2.9	296	4.6	4.1	-2.0	269	9.7	9.7	0.1	269	17.8	17.8	0.4	275	31.9	31.8	-2.8	266	43.4	43.3	3.3	272	25.3	25.3	-0.7			
30	341	4.3	1.4	-4.1	294	4.3	3.9	-1.7	273	7.8	7.8	-0.4	272	18.1	18.1	-0.7	271	31.8	31.8	-0.5	269	38.4	38.4	1.0	248	45.1	41.9	16.6			
31	324	4.4	2.6	-3.6	295	5.1	4.6	-2.1	272	7.9	7.9	-0.3	271	18.2	18.2	-0.2	278	32.9	32.6	-4.7	281	36.9	36.2	-7.0	266	24.4	24.3	1.9			

Daily Normals of Upper Air Winds (1971-2000)

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Gwalior

April

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	320	4.7	3.0	-3.6	295	5.0	4.5	-2.1	266	8.8	8.8	0.6	267	21.4	21.4	1.3	266	30.9	30.8	2.2	263	32.7	32.5	3.8	269	17.8	17.8	0.3			
2	311	3.8	2.9	-2.5	282	4.2	4.1	-0.9	272	9.2	9.2	-0.4	274	19.7	19.7	-1.3	266	35.3	35.2	2.4	267	39.2	39.2	1.8	265	24.7	24.6	2.3			
3	332	4.7	2.2	-4.2	292	5.6	5.2	-2.1	262	8.9	8.8	1.2	271	17.8	17.8	-0.3	263	30.7	30.4	4.0	261	36.6	36.1	6.0	267	21.6	21.6	1.0			
4	328	4.1	2.2	-3.5	294	5.2	4.8	-2.1	259	7.6	7.5	1.5	278	18.3	18.1	-2.4	275	33.8	33.7	-2.8	269	46.3	46.3	0.8	274	33.7	33.6	-2.3			
5	311	2.8	2.1	-1.8	310	4.5	3.5	-2.9	277	8.8	8.7	-1.0	274	16.8	16.8	-1.2	276	28.1	27.9	-3.1	276	37.2	37.0	-3.9	275	30.8	30.7	-2.5			
6	308	5.2	4.1	-3.2	294	6.4	5.9	-2.6	279	8.8	8.7	-1.4	276	16.6	16.5	-1.7	277	32.7	32.4	-4.1	266	38.2	38.1	2.4	260	25.4	25.0	4.2			
7	321	6.0	3.8	-4.7	299	6.0	5.2	-2.9	271	8.6	8.6	-0.2	273	18.3	18.3	-0.8	277	32.4	32.1	-4.1	269	39.7	39.7	0.5	263	17.1	17.0	2.0			
8	298	4.9	4.3	-2.3	288	5.9	5.6	-1.8	269	9.0	9.0	0.1	271	17.7	17.7	-0.3	282	32.7	32.0	-6.7	276	31.7	31.5	-3.4	284	25.0	24.2	-6.2			
9	319	4.1	2.7	-3.1	295	5.3	4.8	-2.2	266	9.4	9.4	0.6	275	18.0	17.9	-1.6	263	30.4	30.2	3.8	264	39.2	39.0	4.1	279	19.2	19.0	-3.0			
10	279	3.3	3.3	-0.5	295	5.1	4.6	-2.1	273	10.4	10.4	-0.5	274	16.3	16.3	-1.0	271	26.2	26.2	-0.6	266	31.7	31.6	2.4	269	24.0	24.0	0.4			
11	344	2.2	0.6	-2.1	299	3.7	3.2	-1.8	269	7.9	7.9	0.1	274	15.3	15.3	-1.0	275	27.2	27.1	-2.2	278	35.3	35.0	-4.9	270	22.6	22.6	0.0			
12	329	2.6	1.3	-2.2	289	4.0	3.8	-1.3	274	6.5	6.5	-0.4	270	18.5	18.5	-0.1	268	30.8	30.8	1.1	265	31.7	31.6	2.8	266	21.0	21.0	1.4			
13	330	3.4	1.7	-2.9	302	3.9	3.3	-2.1	269	7.9	7.9	0.2	269	17.2	17.2	0.2	275	25.0	24.9	-2.3	279	30.7	30.3	-4.7	282	27.2	26.6	-5.8			
14	316	4.0	2.8	-2.9	290	5.9	5.6	-2.0	264	8.8	8.8	0.9	269	15.9	15.9	0.3	263	27.1	26.9	3.4	265	36.8	36.7	3.1	235	7.7	6.3	4.4			
15	295	2.6	2.4	-1.1	301	4.1	3.5	-2.1	273	6.8	6.8	-0.3	270	14.3	14.3	0.1	271	25.0	25.0	-0.6	266	31.3	31.2	2.3	273	13.3	13.3	-0.8			
16	310	5.4	4.1	-3.5	298	6.4	5.6	-3.0	271	7.9	7.9	-0.2	278	17.6	17.4	-2.4	269	28.9	28.9	0.3	267	25.7	25.7	1.4	267	22.8	22.8	1.1			
17	315	6.2	4.4	-4.4	313	6.3	4.6	-4.3	291	7.5	7.0	-2.7	283	16.1	15.7	-3.7	283	23.6	23.0	-5.1	284	24.3	23.5	-6.0	289	21.4	20.2	-7.0			
18	317	4.9	3.3	-3.6	301	5.8	5.0	-3.0	277	7.8	7.7	-1.0	278	13.2	13.1	-1.8	272	27.4	27.4	-0.9	277	32.4	32.1	-4.1	258	17.2	16.8	3.6			
19	294	4.5	4.1	-1.8	286	5.0	4.8	-1.4	276	6.3	6.3	-0.7	285	15.8	15.3	-4.1	286	25.0	24.0	-6.9	285	31.3	30.2	-8.3	288	33.2	31.6	-10.2			
20	311	4.5	3.4	-3.0	304	5.8	4.8	-3.2	276	7.1	7.1	-0.8	280	12.7	12.5	-2.3	278	19.8	19.6	-2.7	278	24.8	24.6	-3.5	284	16.7	16.2	-4.1			
21	295	3.8	3.5	-1.6	298	5.4	4.8	-2.5	284	6.4	6.2	-1.5	275	11.3	11.3	-1.0	272	20.3	20.3	-0.8	273	25.9	25.9	-1.5	269	20.6	20.6	0.4			
22	295	3.3	3.0	-1.4	296	5.1	4.6	-2.2	273	7.5	7.5	-0.4	270	12.2	12.2	0.0	272	24.2	24.2	-0.8	257	28.5	27.7	6.5	274	19.5	19.5	-1.2			
23	309	5.7	4.4	-3.6	295	6.0	5.4	-2.5	274	7.9	7.9	-0.6	282	12.1	11.8	-2.5	264	19.9	19.8	2.2	262	24.3	24.1	3.3	230	11.9	9.2	7.6			
24	321	5.6	3.5	-4.4	300	6.8	5.9	-3.4	283	7.0	6.8	-1.6	291	10.5	9.8	-3.7	278	18.6	18.4	-2.6	272	27.5	27.5	-1.2	286	15.5	14.9	-4.2			
25	299	6.3	5.5	-3.1	288	6.3	6.0	-2.0	282	6.8	6.7	-1.4	287	11.5	11.0	-3.4	292	19.5	18.1	-7.2	282	29.4	28.7	-6.3	265	12.2	12.2	1.0			
26	313	5.3	3.9	-3.6	306	6.1	4.9	-3.6	287	7.3	7.0	-2.1	292	12.0	11.1	-4.5	293	14.2	13.0	-5.6	277	18.1	18.0	-2.1	259	12.4	12.2	2.3			
27	325	4.5	2.6	-3.7	302	6.1	5.2	-3.2	281	8.2	8.0	-1.6	292	11.7	10.9	-4.3	278	17.2	17.0	-2.5	268	30.0	30.0	0.9	279	19.1	18.8	-3.1			
28	303	4.9	4.1	-2.7	299	5.7	5.0	-2.8	285	7.9	7.6	-2.0	289	12.5	11.8	-4.0	283	19.8	19.3	-4.4	281	29.7	29.1	-5.8	284	21.4	20.7	-5.3			
29	314	5.4	3.9	-3.8	300	6.0	5.2	-3.0	288	7.9	7.5	-2.4	300	14.5	12.6	-7.2	280	15.0	14.8	-2.6	281	23.0	22.6	-4.2	281	11.3	11.1	-2.1			
30	303	4.0	3.4	-2.2	299	6.0	5.2	-2.9	281	6.9	6.8	-1.3	285	12.6	12.2	-3.3	277	21.1	20.9	-2.6	268	25.1	25.1	0.7	277	14.9	14.8	-1.8			

Daily Normals of Upper Air Winds (1971-2000)

137

GWALIOR

MAY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	302	4.9	4.1	-2.6	289	5.4	5.1	-1.8	276	7.5	7.5	-0.8	271	11.9	11.9	-0.2	263	20.1	20.0	2.4	247	27.8	25.6	10.8	244	9.3	8.4	4.1			
2	288	4.5	4.3	-1.4	292	5.5	5.1	-2.1	276	6.1	6.1	-0.6	282	10.8	10.6	-2.3	269	22.5	22.5	0.2	259	26.4	25.9	5.2	244	10.7	9.6	4.7			
3	296	5.1	4.6	-2.2	295	4.7	4.3	-2.0	273	6.6	6.6	-0.4	262	11.8	11.7	1.7	259	22.2	21.8	4.1	249	30.6	28.6	10.8	265	28.1	28.0	2.3			
4	306	2.7	2.2	-1.6	288	4.8	4.6	-1.5	281	7.3	7.2	-1.4	285	13.1	12.7	-3.4	263	22.8	22.6	2.8	264	32.0	31.8	3.6	261	17.6	17.4	2.7			
5	310	5.1	3.9	-3.3	298	5.5	4.9	-2.6	282	7.1	6.9	-1.5	286	12.2	11.7	-3.4	272	23.2	23.2	-0.9	266	28.8	28.7	2.1	275	15.3	15.2	-1.4			
6	294	4.3	3.9	-1.7	290	5.3	5.0	-1.8	278	8.0	7.9	-1.1	280	8.3	8.2	-1.5	275	20.4	20.3	-1.9	274	27.8	27.7	-1.9	295	16.3	14.8	-6.8			
7	317	6.4	4.4	-4.7	304	4.7	3.9	-2.6	270	9.0	9.0	0.0	284	9.3	9.0	-2.2	273	18.9	18.9	-1.0	275	24.1	24.0	-1.9	278	9.2	9.1	-1.3			
8	302	4.1	3.5	-2.2	302	4.0	3.4	-2.1	269	8.2	8.2	0.2	268	10.7	10.7	0.3	271	20.1	20.1	-0.5	269	22.2	22.2	0.4	257	10.7	10.4	2.4			
9	353	4.7	0.6	-4.7	295	4.4	4.0	-1.9	281	7.4	7.3	-1.4	279	11.7	11.6	-1.8	278	21.1	20.9	-2.9	277	22.0	21.8	-2.6	268	6.5	6.5	0.2			
10	331	1.8	0.9	-1.6	294	3.0	2.7	-1.2	274	6.4	6.4	-0.5	281	10.5	10.3	-2.0	270	21.5	21.5	0.0	272	22.4	22.4	-0.8	263	7.4	7.3	0.9			
11	322	2.9	1.8	-2.3	324	3.9	2.3	-3.2	285	5.6	5.4	-1.4	291	10.7	10.0	-3.8	277	13.9	13.8	-1.7	259	21.2	20.8	4.0	267	9.1	9.1	0.5			
12	314	3.3	2.4	-2.3	305	5.0	4.1	-2.9	284	5.6	5.4	-1.3	279	9.0	8.9	-1.4	268	16.6	16.6	0.5	261	22.1	21.9	3.3	246	19.7	18.0	7.9			
13	310	4.3	3.3	-2.8	302	4.4	3.7	-2.3	284	6.8	6.6	-1.6	287	11.7	11.2	-3.4	266	14.5	14.5	1.1	264	23.8	23.7	2.4	236	3.6	3.0	2.0			
14	309	4.5	3.5	-2.8	302	4.5	3.8	-2.4	292	5.7	5.3	-2.1	280	10.3	10.1	-1.8	274	15.6	15.6	-1.0	262	20.9	20.7	2.9	262	5.9	5.8	0.8			
15	317	4.8	3.3	-3.5	304	4.0	3.3	-2.2	290	7.7	7.2	-2.6	278	9.8	9.7	-1.4	275	21.9	21.8	-1.9	273	26.0	26.0	-1.4	285	8.8	8.5	-2.2			
16	312	8.0	5.9	-5.4	305	7.0	5.7	-4.0	287	8.4	8.0	-2.4	295	11.7	10.6	-5.0	274	18.7	18.6	-1.4	260	25.1	24.7	4.4	259	11.2	11.0	2.1			
17	314	7.2	5.2	-5.0	304	7.3	6.0	-4.1	296	7.9	7.1	-3.4	287	10.2	9.7	-3.0	281	18.8	18.4	-3.7	271	21.7	21.7	-0.5	265	9.6	9.6	0.9			
18	291	5.6	5.2	-2.0	294	6.6	6.0	-2.7	286	7.8	7.5	-2.2	293	12.1	11.2	-4.7	288	20.3	19.3	-6.3	252	23.7	22.5	7.4	278	13.9	13.8	-1.9			
19	289	5.7	5.4	-1.9	295	6.1	5.5	-2.6	288	8.6	8.2	-2.6	284	12.0	11.6	-2.9	285	19.9	19.2	-5.2	261	23.3	23.0	3.6	271	10.3	10.3	-0.1			
20	288	4.3	4.1	-1.3	316	4.3	3.0	-3.1	302	7.0	6.0	-3.7	284	11.4	11.0	-2.8	275	17.8	17.7	-1.7	259	19.8	19.5	3.7	241	10.8	9.5	5.2			
21	324	5.1	3.0	-4.1	311	5.7	4.3	-3.7	293	7.4	6.8	-2.9	284	11.4	11.1	-2.7	270	16.6	16.6	0.0	267	17.2	17.2	0.9	247	7.9	7.3	3.1			
22	318	5.2	3.5	-3.9	304	5.0	4.2	-2.8	287	7.7	7.4	-2.2	292	12.6	11.7	-4.7	271	14.7	14.7	-0.2	255	20.3	19.6	5.4	236	4.6	3.8	2.6			
23	300	7.5	6.5	-3.8	309	6.5	5.0	-4.1	280	7.2	7.1	-1.2	295	12.2	11.0	-5.2	279	14.8	14.6	-2.4	250	15.6	14.7	5.3	233	5.9	4.7	3.6			
24	296	5.7	5.1	-2.5	292	6.8	6.3	-2.6	300	9.2	8.0	-4.6	300	12.3	10.7	-6.1	282	15.4	15.1	-3.1	258	18.5	18.1	3.9	182	6.3	0.2	6.3			
25	317	4.8	3.3	-3.5	309	5.4	4.2	-3.4	293	8.8	8.1	-3.4	306	11.3	9.1	-6.7	296	14.0	12.6	-6.2	259	15.1	14.8	3.0	262	5.5	5.4	0.8			
26	298	3.8	3.4	-1.8	288	5.1	4.8	-1.6	290	7.9	7.4	-2.7	295	10.3	9.3	-4.4	270	14.8	14.8	0.1	272	15.0	15.0	-0.5	202	3.8	1.4	3.5			
27	302	6.1	5.2	-3.2	296	7.4	6.7	-3.2	296	8.7	7.8	-3.8	292	10.7	9.9	-4.0	279	18.3	18.1	-2.8	253	18.4	17.6	5.4	291	3.9	3.6	-1.4			
28	303	6.2	5.2	-3.4	301	5.7	4.9	-3.0	292	7.8	7.2	-2.9	291	11.8	11.0	-4.3	267	17.9	17.9	1.0	256	22.0	21.4	5.2	217	6.6	4.0	5.3			
29	291	6.2	5.8	-2.2	288	5.2	5.0	-1.6	280	8.4	8.3	-1.4	282	10.7	10.5	-2.3	267	15.7	15.7	0.7	250	19.9	18.7	6.7	270	2.7	2.7	0.0			
30	300	5.0	4.3	-2.5	294	4.7	4.3	-1.9	274	5.7	5.7	-0.4	281	9.3	9.1	-1.7	261	19.5	19.3	3.1	244	25.8	23.1	11.4	238	4.7	4.0	2.5			
31	299	6.0	5.2	-2.9	299	5.8	5.1	-2.8	273	7.0	7.0	-0.4	276	9.3	9.2	-1.0	253	16.3	15.6	4.8	247	21.6	19.8	8.6	226	6.7	4.8	4.7			

Daily Normals of Upper Air Winds (1971-2000)

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GWALIOR

JUNE

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	296	6.1	5.5	-2.7	301	6.1	5.2	-3.1	286	5.6	5.4	-1.5	283	9.0	8.8	-2.0	252	17.7	16.8	5.5	241	21.0	18.4	10.1	220	9.7	6.2	7.5			
2	305	4.2	3.4	-2.4	312	5.9	4.4	-4.0	292	7.7	7.1	-2.9	295	10.0	9.1	-4.2	261	13.4	13.2	2.2	236	18.2	15.0	10.3	212	9.7	5.1	8.2			
3	328	4.4	2.3	-3.7	314	5.5	4.0	-3.8	294	6.0	5.5	-2.4	290	10.6	10.0	-3.6	250	19.0	17.8	6.6	248	21.4	19.8	8.1	219	8.9	5.6	6.9			
4	309	4.4	3.4	-2.8	303	5.9	5.0	-3.2	295	6.3	5.7	-2.7	302	9.3	7.9	-4.9	259	14.7	14.4	2.9	247	16.0	14.7	6.2	244	8.5	7.7	3.7			
5	346	4.9	1.2	-4.7	316	4.9	3.4	-3.5	285	5.3	5.1	-1.4	285	10.5	10.1	-2.8	268	16.4	16.4	0.5	270	15.5	15.5	0.1	247	5.1	4.7	2.0			
6	309	6.7	5.2	-4.2	300	5.4	4.7	-2.7	293	7.1	6.5	-2.8	295	8.4	7.6	-3.6	266	14.3	14.3	1.1	248	14.0	13.0	5.2	140	3.5	-2.3	2.7			
7	295	6.5	5.9	-2.7	315	5.1	3.6	-3.6	281	5.3	5.2	-1.0	294	8.0	7.3	-3.2	258	12.7	12.4	2.6	236	12.8	10.7	7.1	86	2.6	-2.6	-0.2			
8	286	2.6	2.5	-0.7	321	3.8	2.4	-3.0	311	6.1	4.6	-4.0	307	7.5	6.0	-4.5	271	11.1	11.1	-0.2	266	9.2	9.2	0.7	110	4.8	-4.5	1.6			
9	309	2.7	2.1	-1.7	318	4.7	3.1	-3.5	301	5.8	5.0	-3.0	306	7.4	6.0	-4.4	288	10.8	10.2	-3.4	288	10.9	10.4	-3.4	125	5.7	-4.7	3.3			
10	264	1.0	1.0	0.1	314	3.7	2.7	-2.6	299	5.7	5.0	-2.8	298	7.1	6.3	-3.3	290	6.4	6.0	-2.2	270	5.2	5.2	0.0	112	5.5	-5.1	2.1			
11	294	2.4	2.2	-1.0	314	4.2	3.0	-2.9	299	6.8	5.9	-3.3	289	7.2	6.8	-2.3	283	7.6	7.4	-1.7	266	5.2	5.2	0.4	158	8.0	-3.0	7.4			
12	327	3.1	1.7	-2.6	342	2.5	0.8	-2.4	287	4.4	4.2	-1.3	270	6.7	6.7	0.0	253	8.4	8.0	2.4	254	7.8	7.5	2.1	197	2.1	0.6	2.0			
13	324	2.9	1.7	-2.3	340	3.5	1.2	-3.3	325	5.1	2.9	-4.2	278	7.2	7.1	-1.0	269	7.7	7.7	0.1	247	7.5	6.9	2.9	113	5.0	-4.6	2.0			
14	360	3.3	0.0	-3.3	340	4.6	1.6	-4.3	309	4.4	3.4	-2.8	280	6.0	5.9	-1.0	260	5.9	5.8	1.0	242	7.9	7.0	3.7	124	7.5	-6.2	4.2			
15	360	5.3	0.0	-5.3	342	5.1	1.6	-4.8	319	5.3	3.5	-4.0	285	5.8	5.6	-1.5	254	5.0	4.8	1.4	243	5.9	5.2	2.7	111	8.0	-7.5	2.9			
16	18	4.1	-1.3	-3.9	340	4.4	1.5	-4.1	316	6.4	4.4	-4.6	328	4.0	2.1	-3.4	258	6.6	6.4	1.4	235	6.2	5.1	3.6	140	6.0	-3.9	4.6			
17	111	0.9	-0.8	0.3	348	3.3	0.7	-3.2	329	5.1	2.6	-4.4	310	5.6	4.3	-3.6	264	3.7	3.7	0.4	255	4.2	4.1	1.1	115	8.1	-7.4	3.4			
18	45	2.0	-1.4	-1.4	312	2.4	1.8	-1.6	316	5.8	4.0	-4.2	299	5.8	5.1	-2.8	287	6.4	6.1	-1.9	282	4.3	4.2	-0.9	100	7.7	-7.6	1.3			
19	39	2.2	-1.4	-1.7	322	3.7	2.3	-2.9	317	5.0	3.4	-3.7	307	6.4	5.1	-3.9	287	5.5	5.3	-1.6	122	2.5	-2.1	1.3	58	7.6	-6.5	-4.0			
20	17	1.4	-0.4	-1.3	344	2.2	0.6	-2.1	333	4.8	2.2	-4.3	311	6.0	4.5	-3.9	242	3.2	2.8	1.5	193	4.0	0.9	3.9	94	8.9	-8.9	0.6			
21	185	1.1	0.1	1.1	313	2.1	1.5	-1.4	323	5.0	3.0	-4.0	300	4.3	3.7	-2.1	290	2.7	2.5	-0.9	187	2.5	0.3	2.5	70	15.0	-14.1	-5.0			
22	308	3.3	2.6	-2.0	311	3.5	2.6	-2.3	318	5.5	3.7	-4.1	303	2.0	1.7	-1.1	228	2.8	2.1	1.9	149	5.7	-3.0	4.9	96	8.7	-8.7	0.9			
23	325	3.2	1.8	-2.6	323	3.9	2.3	-3.1	325	4.0	2.3	-3.3	330	3.4	1.7	-2.9	221	1.8	1.2	1.4	144	4.1	-2.4	3.3	79	8.3	-8.1	-1.6			
24	295	4.0	3.6	-1.7	300	4.8	4.2	-2.4	343	4.5	1.3	-4.3	13	5.4	-1.2	-5.3	180	2.2	0.0	2.2	184	4.4	0.3	4.4	102	10.4	-10.2	2.1			
25	265	4.8	4.8	0.4	318	4.5	3.0	-3.3	320	5.7	3.7	-4.4	314	5.6	4.0	-3.9	350	2.8	0.5	-2.8	127	2.0	-1.6	1.2	167	6.5	-1.5	6.3			
26	300	3.6	3.1	-1.8	341	2.8	0.9	-2.6	342	4.9	1.5	-4.7	331	3.1	1.5	-2.7	28	3.0	-1.4	-2.6	114	3.2	-2.9	1.3	88	6.4	-6.4	-0.2			
27	21	1.4	-0.5	-1.3	349	2.6	0.5	-2.6	340	4.8	1.6	-4.5	347	4.5	1.0	-4.4	326	0.4	0.2	-0.3	131	3.8	-2.9	2.5	67	11.8	-10.9	-4.6			
28	6	1.9	-0.2	-1.9	348	3.0	0.6	-2.9	340	4.6	1.6	-4.3	338	2.2	0.8	-2.0	236	0.4	0.3	0.2	102	3.8	-3.7	0.8	67	12.7	-11.7	-5.0			
29	38	1.8	-1.1	-1.4	306	2.7	2.2	-1.6	351	4.0	0.6	-4.0	333	4.0	1.8	-3.6	180	0.9	0.0	0.9	71	5.8	-5.5	-1.9	80	14.5	-14.3	-2.6			
30	31	0.6	-0.3	-0.5	302	2.2	1.9	-1.2	291	4.2	3.9	-1.5	285	3.4	3.3	-0.9	120	0.8	-0.7	0.4	120	3.8	-3.3	1.9	75	13.3	-12.8	-3.5			

Daily Normals of Upper Air Winds (1971-2000)

139

GWALIOR

JULY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	187	1.6	0.2	1.6	256	3.6	3.5	0.9	283	4.7	4.6	-1.1	270	2.5	2.5	0.0	335	1.7	0.7	-1.5	126	1.4	-1.1	0.8	79	14.6	-14.3	-2.8			
2	245	1.9	1.7	0.8	283	1.8	1.8	-0.4	343	3.8	1.1	-3.6	330	3.6	1.8	-3.1	335	2.1	0.9	-1.9	346	0.8	0.2	-0.8	78	13.9	-13.6	-3.0			
3	315	2.5	1.8	-1.8	288	2.8	2.7	-0.9	312	2.5	1.9	-1.7	349	2.1	0.4	-2.1	168	1.9	-0.4	1.9	121	3.5	-3.0	1.8	76	14.1	-13.7	-3.5			
4	351	2.0	0.3	-2.0	289	3.9	3.7	-1.3	290	4.6	4.3	-1.6	282	3.0	2.9	-0.6	338	1.8	0.7	-1.7	90	1.3	-1.3	0.0	73	9.7	-9.3	-2.8			
5	316	3.6	2.5	-2.6	291	4.8	4.5	-1.7	303	5.0	4.2	-2.7	277	0.8	0.8	-0.1	90	0.2	-0.2	0.0	106	4.5	-4.3	1.2	97	11.6	-11.5	1.5			
6	252	5.2	5.0	1.6	288	4.0	3.8	-1.2	326	4.8	2.7	-4.0	340	4.0	1.4	-3.8	90	0.9	-0.9	0.0	101	4.6	-4.5	0.9	75	16.0	-15.4	-4.2			
7	243	3.0	2.7	1.4	317	4.1	2.8	-3.0	322	4.6	2.8	-3.6	315	1.1	0.8	-0.8	60	2.4	-2.1	-1.2	120	6.4	-5.5	3.2	74	14.9	-14.4	-4.0			
8	53	2.0	-1.6	-1.2	337	2.3	0.9	-2.1	348	3.4	0.7	-3.3	72	1.3	-1.2	-0.4	87	5.1	-5.1	-0.3	104	8.1	-7.9	2.0	88	19.0	-19.0	-0.7			
9	360	0.1	0.0	-0.1	327	2.4	1.3	-2.0	327	5.1	2.8	-4.3	334	4.6	2.0	-4.1	75	1.6	-1.5	-0.4	85	7.6	-7.6	-0.7	74	19.1	-18.4	-5.3			
10	300	1.4	1.2	-0.7	300	3.2	2.8	-1.6	313	3.7	2.7	-2.5	321	3.6	2.3	-2.8	99	0.6	-0.6	0.1	94	7.7	-7.7	0.5	85	20.6	-20.5	-1.8			
11	300	3.6	3.1	-1.8	312	3.9	2.9	-2.6	329	2.7	1.4	-2.3	97	0.8	-0.8	0.1	123	3.7	-3.1	2.0	100	7.2	-7.1	1.3	96	15.9	-15.8	1.8			
12	158	1.1	-0.4	1.0	346	1.2	0.3	-1.2	16	1.9	-0.5	-1.8	57	2.4	-2.0	-1.3	136	6.0	-4.2	4.3	98	8.3	-8.2	1.1	90	15.6	-15.6	-0.1			
13	283	2.3	2.2	-0.5	315	2.0	1.4	-1.4	331	2.3	1.1	-2.0	207	0.4	0.2	0.4	115	6.9	-6.3	2.9	97	7.0	-7.0	0.8	88	12.5	-12.5	-0.4			
14	280	2.3	2.3	-0.4	285	2.7	2.6	-0.7	267	1.7	1.7	0.1	26	3.0	-1.3	-2.7	86	6.5	-6.5	-0.4	74	9.5	-9.1	-2.6	73	15.9	-15.2	-4.7			
15	100	1.1	-1.1	0.2	282	1.4	1.4	-0.3	288	0.9	0.9	-0.3	121	2.9	-2.5	1.5	149	4.5	-2.3	3.9	89	9.3	-9.3	-0.2	88	17.2	-17.2	-0.7			
16	51	2.1	-1.6	-1.3	248	0.5	0.5	0.2	350	1.1	0.2	-1.1	88	2.3	-2.3	-0.1	84	5.9	-5.9	-0.6	77	11.1	-10.8	-2.5	91	22.7	-22.7	0.3			
17	182	2.8	0.1	2.8	252	0.3	0.3	0.1	346	1.2	0.3	-1.2	204	1.0	0.4	0.9	83	4.2	-4.2	-0.5	91	8.0	-8.0	0.1	95	20.4	-20.3	1.9			
18	233	1.0	0.8	0.6	295	1.4	1.3	-0.6	345	1.6	0.4	-1.5	301	0.6	0.5	-0.3	84	5.1	-5.1	-0.5	98	7.6	-7.5	1.0	90	19.7	-19.7	0.0			
19	121	0.6	-0.5	0.3	283	0.9	0.9	-0.2	194	0.4	0.1	0.4	312	1.3	1.0	-0.9	78	4.4	-4.3	-0.9	89	8.1	-8.1	-0.1	80	14.8	-14.6	-2.7			
20	115	3.8	-3.4	1.6	54	1.4	-1.1	-0.8	93	2.1	-2.1	0.1	121	2.7	-2.3	1.4	88	7.0	-7.0	-0.3	91	8.3	-8.3	0.1	74	16.8	-16.2	-4.6			
21	211	2.6	1.3	2.2	76	0.4	-0.4	-0.1	270	0.6	0.6	0.0	98	2.8	-2.8	0.4	63	4.9	-4.4	-2.2	73	10.8	-10.3	-3.1	77	19.7	-19.2	-4.5			
22	256	4.9	4.7	1.2	243	1.3	1.2	0.6	209	1.0	0.5	0.9	295	1.9	1.7	-0.8	103	5.7	-5.6	1.3	75	9.3	-9.0	-2.4	92	14.0	-14.0	0.6			
23	286	2.2	2.1	-0.6	198	0.3	0.1	0.3	315	0.4	0.3	-0.3	52	1.8	-1.4	-1.1	90	5.3	-5.3	0.0	77	8.1	-7.9	-1.8	74	18.0	-17.3	-5.0			
24	287	2.1	2.0	-0.6	287	1.0	1.0	-0.3	302	0.9	0.8	-0.5	76	0.8	-0.8	-0.2	90	6.7	-6.7	0.0	107	9.6	-9.2	2.9	84	14.8	-14.7	-1.5			
25	244	2.5	2.3	1.1	298	1.7	1.5	-0.8	300	0.8	0.7	-0.4	172	1.4	-0.2	1.4	69	5.0	-4.7	-1.8	98	8.0	-7.9	1.1	74	18.0	-17.3	-4.9			
26	317	1.9	1.3	-1.4	347	2.2	0.5	-2.1	10	2.9	-0.5	-2.9	78	1.4	-1.4	-0.3	95	6.1	-6.1	0.5	102	8.8	-8.6	1.8	92	20.1	-20.1	0.7			
27	318	1.2	0.8	-0.9	302	2.5	2.1	-1.3	350	2.8	0.5	-2.8	79	3.2	-3.1	-0.6	77	7.0	-6.8	-1.6	76	11.4	-11.1	-2.8	76	23.5	-22.8	-5.7			
28	20	2.3	-0.8	-2.2	359	3.9	0.1	-3.9	6	2.7	-0.3	-2.7	50	3.0	-2.3	-1.9	106	9.3	-8.9	2.6	77	14.1	-13.7	-3.2	79	19.9	-19.6	-3.7			
29	335	1.7	0.7	-1.5	342	1.3	0.4	-1.2	360	2.2	0.0	-2.2	72	4.7	-4.5	-1.5	80	9.7	-9.6	-1.7	79	10.8	-10.6	-2.0	88	24.1	-24.1	-0.9			
30	11	2.1	-0.4	-2.1	338	3.2	1.2	-3.0	355	2.4	0.2	-2.4	92	3.1	-3.1	0.1	102	6.0	-5.9	1.3	83	13.8	-13.7	-1.8	88	22.1	-22.1	-0.9			
31	95	2.1	-2.1	0.2	113	0.8	-0.7	0.3	74	0.7	-0.7	-0.2	73	2.1	-2.0	-0.6	85	5.3	-5.3	-0.5	91	12.1	-12.1	0.3	87	21.4	-21.4	-1.3			

Daily Normals of Upper Air Winds (1971-2000)

140

Gwalior

August

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	308	1.1	0.9	-0.7	302	1.3	1.1	-0.7	8	2.7	-0.4	-2.7	63	2.2	-2.0	-1.0	85	6.6	-6.6	-0.6	85	11.0	-11.0	-0.9	86	20.9	-20.8	-1.5			
2	276	2.0	2.0	-0.2	90	0.3	-0.3	0.0	94	3.2	-3.2	0.2	207	0.2	0.1	0.2	91	6.6	-6.6	0.1	93	8.6	-8.6	0.5	80	17.8	-17.5	-3.2			
3	314	3.6	2.6	-2.5	306	1.4	1.1	-0.8	5	1.2	-0.1	-1.2	47	2.1	-1.5	-1.4	100	6.4	-6.3	1.1	86	7.7	-7.7	-0.6	70	21.5	-20.2	-7.5			
4	309	1.9	1.5	-1.2	330	2.8	1.4	-2.4	359	3.9	0.1	-3.9	80	4.5	-4.4	-0.8	114	6.4	-5.8	2.6	88	9.8	-9.8	-0.4	86	22.1	-22.0	-1.6			
5	301	3.5	3.0	-1.8	333	2.5	1.1	-2.2	9	3.3	-0.5	-3.3	51	4.0	-3.1	-2.5	88	9.8	-9.8	-0.3	78	11.0	-10.8	-2.3	66	18.7	-17.1	-7.5			
6	289	4.3	4.1	-1.4	300	1.4	1.2	-0.7	18	1.9	-0.6	-1.8	70	3.3	-3.1	-1.1	93	10.6	-10.6	0.5	69	11.8	-11.0	-4.3	83	21.9	-21.7	-2.8			
7	274	5.3	5.3	-0.4	324	2.4	1.4	-1.9	67	1.3	-1.2	-0.5	83	5.4	-5.4	-0.7	96	9.2	-9.1	1.0	78	12.9	-12.6	-2.6	81	27.2	-26.9	-4.1			
8	279	3.2	3.2	-0.5	51	1.3	-1.0	-0.8	101	0.5	-0.5	0.1	68	3.7	-3.4	-1.4	97	8.5	-8.4	1.0	78	12.9	-12.6	-2.7	79	19.2	-18.8	-3.8			
9	284	2.5	2.4	-0.6	62	2.4	-2.1	-1.1	51	2.7	-2.1	-1.7	77	5.2	-5.1	-1.2	77	7.4	-7.2	-1.7	82	11.4	-11.3	-1.5	87	20.6	-20.6	-0.9			
10	228	1.3	1.0	0.9	180	0.4	0.0	0.4	48	1.2	-0.9	-0.8	23	1.3	-0.5	-1.2	76	4.2	-4.1	-1.0	83	11.5	-11.4	-1.5	80	18.5	-18.2	-3.3			
11	284	2.5	2.4	-0.6	292	1.8	1.7	-0.7	309	1.9	1.5	-1.2	59	0.6	-0.5	-0.3	65	2.1	-1.9	-0.9	97	5.5	-5.5	0.7	81	13.6	-13.4	-2.1			
12	306	2.2	1.8	-1.3	302	3.4	2.9	-1.8	308	2.8	2.2	-1.7	357	2.0	0.1	-2.0	57	3.0	-2.5	-1.6	100	7.8	-7.7	1.3	84	16.2	-16.1	-1.8			
13	245	5.7	5.2	2.4	283	3.6	3.5	-0.8	328	2.8	1.5	-2.4	331	1.0	0.5	-0.9	117	3.1	-2.8	1.4	115	8.6	-7.8	3.7	85	9.5	-9.5	-0.8			
14	269	6.2	6.2	0.1	341	2.8	0.9	-2.6	341	3.7	1.2	-3.5	354	2.7	0.3	-2.7	90	3.7	-3.7	0.0	114	9.5	-8.7	3.9	96	22.4	-22.3	2.2			
15	273	5.3	5.3	-0.3	326	2.5	1.4	-2.1	352	3.4	0.5	-3.4	6	2.0	-0.2	-2.0	117	3.4	-3.0	1.5	113	6.3	-5.8	2.5	82	14.8	-14.7	-2.0			
16	288	3.8	3.6	-1.2	360	1.8	0.0	-1.8	12	3.4	-0.7	-3.3	49	2.1	-1.6	-1.4	104	4.6	-4.5	1.1	97	8.7	-8.6	1.1	78	16.4	-16.1	-3.3			
17	263	3.9	3.9	0.5	16	0.7	-0.2	-0.7	15	2.4	-0.6	-2.3	43	1.9	-1.3	-1.4	73	7.3	-7.0	-2.2	94	6.1	-6.1	0.4	83	16.3	-16.2	-2.1			
18	329	1.7	0.9	-1.5	354	2.0	0.2	-2.0	38	4.1	-2.5	-3.2	58	3.2	-2.7	-1.7	103	4.7	-4.6	1.1	102	6.6	-6.4	1.4	84	17.7	-17.6	-1.7			
19	20	2.3	-0.8	-2.2	350	2.9	0.5	-2.9	360	3.1	0.0	-3.1	33	1.7	-0.9	-1.4	113	5.9	-5.4	2.3	90	7.3	-7.3	0.0	75	19.0	-18.4	-4.9			
20	270	2.1	2.1	0.0	300	2.4	2.1	-1.2	3	2.2	-0.1	-2.2	297	0.9	0.8	-0.4	104	3.4	-3.3	0.8	102	6.2	-6.1	1.3	91	17.5	-17.5	0.2			
21	343	3.4	1.0	-3.2	333	3.3	1.5	-2.9	346	3.4	0.8	-3.3	76	1.6	-1.6	-0.4	97	3.4	-3.4	0.4	96	8.2	-8.2	0.8	90	12.8	-12.8	0.0			
22	303	2.4	2.0	-1.3	319	1.8	1.2	-1.4	333	2.2	1.0	-2.0	74	1.9	-1.8	-0.5	133	3.5	-2.6	2.4	101	6.7	-6.6	1.3	88	17.7	-17.7	-0.5			
23	335	1.7	0.7	-1.5	333	1.1	0.5	-1.0	6	2.0	-0.2	-2.0	187	0.8	0.1	0.8	114	2.2	-2.0	0.9	125	6.8	-5.6	3.9	91	18.7	-18.7	0.3			
24	273	1.8	1.8	-0.1	297	2.0	1.8	-0.9	334	2.8	1.2	-2.5	5	2.1	-0.2	-2.1	85	2.5	-2.5	-0.2	106	8.0	-7.7	2.2	82	14.1	-14.0	-2.0			
25	81	1.2	-1.2	-0.2	275	2.1	2.1	-0.2	312	2.4	1.8	-1.6	127	1.0	-0.8	0.6	135	5.7	-4.0	4.0	89	9.6	-9.6	-0.2	88	14.1	-14.1	-0.6			
26	106	1.5	-1.4	0.4	263	2.3	2.3	0.3	324	2.7	1.6	-2.2	18	1.3	-0.4	-1.2	146	2.3	-1.3	1.9	126	5.9	-4.8	3.5	85	16.5	-16.4	-1.4			
27	56	0.7	-0.6	-0.4	293	2.5	2.3	-1.0	11	1.0	-0.2	-1.0	121	1.2	-1.0	0.6	113	2.8	-2.6	1.1	113	7.3	-6.7	2.9	88	12.5	-12.5	-0.5			
28	313	2.2	1.6	-1.5	277	6.1	6.1	-0.7	352	3.4	0.5	-3.4	18	0.9	-0.3	-0.9	122	4.6	-3.9	2.4	109	7.2	-6.8	2.4	96	14.3	-14.2	1.4			
29	7	3.1	-0.4	-3.1	330	2.8	1.4	-2.4	358	3.3	0.1	-3.3	351	2.6	0.4	-2.6	108	3.8	-3.6	1.2	124	8.3	-6.9	4.7	98	11.6	-11.5	1.7			
30	329	1.2	0.6	-1.0	356	2.7	0.2	-2.7	4	3.9	-0.3	-3.9	350	1.7	0.3	-1.7	85	3.3	-3.3	-0.3	128	6.6	-5.2	4.1	93	11.0	-11.0	0.5			
31	347	4.0	0.9	-3.9	349	4.4	0.8	-4.3	358	5.2	0.2	-5.2	14	2.1	-0.5	-2.0	93	2.1	-2.1	0.1	129	7.7	-6.0	4.9	87	11.1	-11.1	-0.6			

Daily Normals of Upper Air Winds (1971-2000)

GWALIOR

SEPTEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	24	2.4	-1.0	-2.2	6	2.8	-0.3	-2.8	4	5.5	-0.4	-5.5	64	3.2	-2.9	-1.4	134	2.9	-2.1	2.0	126	8.0	-6.5	4.7	91	15.4	-15.4	0.3
2	8	4.2	-0.6	-4.2	353	3.3	0.4	-3.3	1	5.2	-0.1	-5.2	87	1.8	-1.8	-0.1	92	3.5	-3.5	0.1	87	5.3	-5.3	-0.3	97	13.8	-13.7	1.6
3	8	2.1	-0.3	-2.1	329	3.7	1.9	-3.2	346	3.8	0.9	-3.7	333	0.7	0.3	-0.6	144	1.7	-1.0	1.4	127	6.7	-5.4	4.0	92	14.5	-14.5	0.5
4	300	1.6	1.4	-0.8	325	3.8	2.2	-3.1	357	2.0	0.1	-2.0	51	0.6	-0.5	-0.4	157	2.1	-0.8	1.9	127	4.1	-3.3	2.5	124	14.1	-11.7	7.9
5	13	2.2	-0.5	-2.1	338	2.4	0.9	-2.2	327	2.4	1.3	-2.0	101	0.5	-0.5	0.1	165	4.3	-1.1	4.2	129	4.6	-3.6	2.9	95	12.5	-12.5	1.1
6	297	1.1	1.0	-0.5	308	3.7	2.9	-2.3	342	5.2	1.6	-5.0	343	1.0	0.3	-1.0	88	3.1	-3.1	-0.1	129	6.5	-5.0	4.1	104	13.1	-12.7	3.2
7	341	4.2	1.4	-4.0	320	5.0	3.2	-3.8	343	5.6	1.6	-5.4	7	2.5	-0.3	-2.5	50	1.7	-1.3	-1.1	110	4.6	-4.3	1.6	92	11.8	-11.8	0.5
8	24	1.7	-0.7	-1.6	322	1.8	1.1	-1.4	337	2.3	0.9	-2.1	59	0.6	-0.5	-0.3	243	1.3	1.2	0.6	133	4.9	-3.6	3.3	87	14.8	-14.8	-0.7
9	59	1.7	-1.5	-0.9	337	2.3	0.9	-2.1	323	3.0	1.8	-2.4	166	0.4	-0.1	0.4	215	1.9	1.1	1.6	165	3.8	-1.0	3.7	102	9.7	-9.5	2.1
10	324	1.9	1.1	-1.5	316	4.0	2.8	-2.9	320	5.2	3.3	-4.0	305	2.8	2.3	-1.6	223	2.3	1.6	1.7	161	1.8	-0.6	1.7	116	10.3	-9.3	4.5
11	297	3.3	2.9	-1.5	317	4.5	3.1	-3.3	321	4.1	2.6	-3.2	304	2.9	2.4	-1.6	236	4.8	4.0	2.7	182	3.0	0.1	3.0	96	8.1	-8.1	0.9
12	309	3.8	3.0	-2.4	312	4.6	3.4	-3.1	324	4.1	2.4	-3.3	278	2.2	2.2	-0.3	239	5.0	4.3	2.6	153	4.0	-1.8	3.6	98	10.9	-10.8	1.5
13	347	3.6	0.8	-3.5	323	4.8	2.9	-3.8	330	3.8	1.9	-3.3	291	4.5	4.2	-1.6	250	2.7	2.5	0.9	229	2.9	2.2	1.9	90	8.7	-8.7	0.0
14	37	4.5	-2.7	-3.6	339	4.7	1.7	-4.4	334	5.5	2.4	-5.0	290	3.0	2.8	-1.0	265	2.2	2.2	0.2	213	2.4	1.3	2.0	100	8.3	-8.2	1.4
15	20	4.6	-1.6	-4.3	354	6.0	0.6	-6.0	343	5.0	1.5	-4.8	305	2.9	2.4	-1.7	253	3.1	3.0	0.9	184	4.6	0.3	4.6	109	5.8	-5.5	1.9
16	345	3.0	0.8	-2.9	336	4.9	2.0	-4.5	348	5.7	1.2	-5.6	307	3.6	2.9	-2.2	269	6.2	6.2	0.1	266	5.8	5.8	0.4	211	6.3	3.2	5.4
17	23	1.5	-0.6	-1.4	329	3.1	1.6	-2.7	342	3.6	1.1	-3.4	279	1.3	1.3	-0.2	246	6.0	5.5	2.4	227	6.7	4.9	4.6	132	6.6	-4.9	4.4
18	23	3.4	-1.3	-3.1	349	4.7	0.9	-4.6	334	4.3	1.9	-3.9	288	3.8	3.6	-1.2	252	6.6	6.3	2.1	228	8.9	6.6	6.0	140	3.1	-2.0	2.4
19	301	2.7	2.3	-1.4	330	4.6	2.3	-4.0	315	4.7	3.3	-3.3	251	4.2	4.0	1.4	239	6.9	5.9	3.5	228	6.7	5.0	4.5	81	3.9	-3.9	-0.6
20	303	3.3	2.8	-1.8	330	3.0	1.5	-2.6	330	3.6	1.8	-3.1	275	4.5	4.5	-0.4	249	8.6	8.0	3.1	248	10.5	9.7	4.0	176	1.6	-0.1	1.6
21	287	2.4	2.3	-0.7	331	2.6	1.3	-2.3	324	3.6	2.1	-2.9	270	3.7	3.7	0.0	239	10.2	8.8	5.2	229	12.1	9.1	8.0	183	3.5	0.2	3.5
22	355	4.2	0.4	-4.2	338	3.5	1.3	-3.2	342	4.6	1.4	-4.4	257	3.6	3.5	0.8	246	10.0	9.1	4.1	248	10.6	9.8	4.0	135	2.8	-2.0	2.0
23	333	2.9	1.3	-2.6	2	2.8	-0.1	-2.8	357	3.3	0.2	-3.3	255	2.7	2.6	0.7	243	8.3	7.4	3.7	248	12.3	11.4	4.7	179	5.0	-0.1	5.0
24	337	4.7	1.8	-4.3	330	3.4	1.7	-2.9	325	3.3	1.9	-2.7	276	5.0	5.0	-0.5	248	9.2	8.5	3.5	250	10.7	10.1	3.6	109	6.7	-6.3	2.2
25	337	3.6	1.4	-3.3	340	4.5	1.5	-4.2	335	5.4	2.3	-4.9	317	4.8	3.3	-3.5	263	7.3	7.2	0.9	249	8.5	7.9	3.1	211	1.7	0.9	1.5
26	340	4.1	1.4	-3.9	335	4.0	1.7	-3.6	322	4.8	3.0	-3.8	315	5.5	3.9	-3.9	267	8.1	8.1	0.4	258	11.7	11.5	2.4	131	0.9	-0.7	0.6
27	322	2.8	1.7	-2.2	333	3.3	1.5	-2.9	333	4.0	1.8	-3.6	296	4.8	4.3	-2.1	263	9.6	9.5	1.1	268	9.2	9.2	0.4	263	1.6	1.6	0.2
28	350	3.5	0.6	-3.4	331	5.5	2.7	-4.8	314	4.9	3.5	-3.4	296	7.0	6.3	-3.1	258	9.9	9.7	2.1	250	13.0	12.2	4.4	18	0.6	-0.2	-0.6
29	7	3.9	-0.5	-3.9	328	4.5	2.4	-3.8	321	5.3	3.3	-4.1	292	6.7	6.2	-2.5	265	12.3	12.3	1.1	251	14.5	13.7	4.6	224	3.0	2.1	2.2
30	322	3.1	1.9	-2.4	328	3.9	2.1	-3.3	313	5.2	3.8	-3.6	281	6.5	6.4	-1.3	263	13.1	13.0	1.5	258	14.9	14.6	3.2	242	5.9	5.2	2.8

Daily Normals of Upper Air Winds (1971-2000)

142

GWALIOR

OCTOBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	342	4.1	1.3	-3.9	336	4.4	1.8	-4.0	317	6.2	4.2	-4.5	283	6.3	6.1	-1.4	247	12.5	11.5	4.8	248	12.8	11.9	4.7	204	3.5	1.4	3.2			
2	333	3.5	1.6	-3.1	337	4.8	1.9	-4.4	320	5.7	3.7	-4.4	292	7.5	7.0	-2.8	254	14.1	13.6	3.9	248	17.4	16.2	6.4	216	6.9	4.0	5.6			
3	309	4.4	3.4	-2.8	330	4.6	2.3	-4.0	326	5.9	3.3	-4.9	295	6.3	5.7	-2.7	258	17.2	16.8	3.5	257	22.7	22.1	5.2	258	5.8	5.7	1.2			
4	351	3.2	0.5	-3.2	351	3.9	0.6	-3.9	330	5.0	2.5	-4.3	285	7.3	7.0	-1.9	254	14.2	13.7	3.9	255	19.2	18.5	5.1	258	9.6	9.4	2.0			
5	354	1.8	0.2	-1.8	313	3.4	2.5	-2.3	319	4.5	3.0	-3.4	286	8.0	7.7	-2.2	257	16.4	16.0	3.7	245	16.1	14.6	6.9	268	8.0	8.0	0.3			
6	9	3.2	-0.5	-3.2	333	2.0	0.9	-1.8	307	4.6	3.7	-2.8	284	6.7	6.5	-1.6	260	14.0	13.8	2.4	255	16.5	16.0	4.2	243	6.2	5.5	2.8			
7	16	3.5	-1.0	-3.4	343	2.8	0.8	-2.7	313	3.7	2.7	-2.5	301	7.1	6.1	-3.6	268	15.3	15.3	0.5	257	18.4	17.9	4.2	269	6.9	6.9	0.1			
8	357	3.8	0.2	-3.8	336	3.2	1.3	-2.9	312	3.8	2.8	-2.5	285	6.7	6.5	-1.8	263	15.3	15.2	1.9	257	16.4	16.0	3.6	259	6.1	6.0	1.2			
9	350	4.2	0.7	-4.1	332	3.0	1.4	-2.6	311	5.7	4.3	-3.7	302	9.3	7.9	-4.9	275	15.4	15.3	-1.3	270	15.8	15.8	-0.1	276	5.8	5.8	-0.6			
10	18	3.8	-1.2	-3.6	336	3.0	1.2	-2.7	289	6.0	5.7	-2.0	282	10.5	10.3	-2.1	264	14.8	14.7	1.6	254	18.2	17.5	5.1	276	10.5	10.4	-1.1			
11	21	1.7	-0.6	-1.6	319	3.0	2.0	-2.3	290	4.8	4.5	-1.6	278	11.5	11.4	-1.6	261	23.1	22.8	3.5	259	22.3	21.9	4.3	263	10.6	10.5	1.2			
12	4	3.0	-0.2	-3.0	321	4.0	2.5	-3.1	303	4.9	4.1	-2.7	278	10.5	10.4	-1.5	264	17.0	16.9	1.7	274	22.2	22.2	-1.4	257	8.8	8.6	2.0			
13	332	4.4	2.1	-3.9	330	3.8	1.9	-3.3	315	5.4	3.8	-3.8	278	11.4	11.3	-1.5	265	20.2	20.1	1.6	255	24.5	23.7	6.2	299	4.8	4.2	-2.3			
14	331	3.8	1.8	-3.3	311	3.8	2.9	-2.5	301	6.1	5.2	-3.1	285	9.5	9.2	-2.5	265	21.1	21.0	2.0	261	25.1	24.8	4.1	259	9.8	9.6	1.9			
15	339	3.4	1.2	-3.2	310	3.4	2.6	-2.2	306	5.7	4.6	-3.3	276	9.8	9.7	-1.1	267	20.6	20.6	1.1	267	23.8	23.8	1.3	267	15.2	15.2	0.8			
16	340	2.0	0.7	-1.9	323	3.1	1.9	-2.5	299	3.8	3.3	-1.8	277	11.4	11.3	-1.4	265	19.8	19.7	1.8	251	21.2	20.1	6.8	269	14.5	14.5	0.2			
17	337	2.1	0.8	-1.9	322	2.8	1.7	-2.2	288	4.6	4.4	-1.4	275	11.1	11.1	-0.9	264	20.1	20.0	2.1	255	24.8	24.0	6.4	244	11.7	10.5	5.1			
18	327	2.7	1.5	-2.3	316	3.6	2.5	-2.6	315	4.2	3.0	-3.0	277	11.4	11.3	-1.4	252	21.8	20.8	6.6	242	24.7	21.9	11.5	234	8.4	6.8	4.9			
19	319	3.5	2.3	-2.6	315	3.1	2.2	-2.2	304	4.7	3.9	-2.6	271	12.3	12.3	-0.2	258	23.8	23.2	5.1	255	29.8	28.8	7.6	243	14.6	13.0	6.6			
20	329	2.3	1.2	-2.0	322	3.7	2.3	-2.9	299	6.0	5.3	-2.9	283	13.0	12.7	-2.9	261	26.8	26.5	4.2	258	29.2	28.6	6.1	216	9.0	5.3	7.3			
21	343	3.4	1.0	-3.3	328	4.9	2.6	-4.2	308	5.7	4.5	-3.5	288	10.5	10.0	-3.3	269	22.1	22.1	0.2	263	20.2	20.0	2.5	249	15.5	14.5	5.6			
22	322	2.4	1.5	-1.9	322	3.6	2.2	-2.8	319	6.0	3.9	-4.5	268	9.1	9.1	0.3	263	22.6	22.4	2.6	254	26.2	25.2	7.0	254	8.5	8.2	2.4			
23	308	2.8	2.2	-1.7	324	3.2	1.9	-2.6	307	5.4	4.3	-3.2	267	9.7	9.7	0.5	260	27.7	27.3	4.6	257	30.7	29.9	7.1	271	14.7	14.7	-0.2			
24	360	2.0	0.0	-2.0	330	3.0	1.5	-2.6	314	5.2	3.7	-3.6	284	10.7	10.4	-2.5	275	25.3	25.2	-2.1	269	23.9	23.9	0.5	265	11.7	11.6	1.1			
25	355	2.3	0.2	-2.3	331	3.9	1.9	-3.4	316	6.6	4.6	-4.8	279	12.6	12.5	-1.9	264	28.9	28.7	3.2	264	35.9	35.7	3.5	255	16.0	15.5	4.1			
26	348	3.5	0.7	-3.4	324	3.4	2.0	-2.8	300	5.6	4.8	-2.8	281	11.2	11.0	-2.2	271	27.1	27.1	-0.7	261	31.7	31.3	5.1	204	6.4	2.6	5.8			
27	337	4.3	1.7	-4.0	320	4.5	2.9	-3.4	300	5.9	5.1	-2.9	276	12.1	12.0	-1.3	261	27.4	27.1	4.1	257	35.3	34.4	8.0	279	38.0	37.5	-5.9			
28	356	2.6	0.2	-2.6	328	3.1	1.6	-2.6	319	5.5	3.6	-4.1	281	10.6	10.4	-2.1	270	20.9	20.9	0.0	265	30.3	30.2	2.4	264	21.8	21.7	2.2			
29	358	3.7	0.1	-3.7	333	2.8	1.3	-2.5	309	4.4	3.4	-2.8	282	9.5	9.3	-2.0	259	25.1	24.6	4.8	250	34.5	32.4	11.9	255	21.6	20.9	5.5			
30	351	2.4	0.4	-2.4	331	2.6	1.3	-2.3	320	4.5	2.9	-3.4	281	9.8	9.6	-1.9	261	26.7	26.4	4.2	259	27.9	27.4	5.1	253	16.3	15.6	4.7			
31	353	1.6	0.2	-1.6	340	2.3	0.8	-2.2	297	5.1	4.5	-2.3	276	12.1	12.0	-1.3	262	25.0	24.8	3.5	260	31.9	31.4	5.5	234	17.0	13.8	10.0			

Daily Normals of Upper Air Winds (1971-2000)

143

GWALIOR

NOVEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	358	3.6	0.1	-3.6	336	3.0	1.2	-2.7	293	5.1	4.7	-2.0	283	12.9	12.5	-3.0	274	24.8	24.7	-1.7	265	31.6	31.5	2.6	269	10.2	10.2	0.2			
2	343	2.8	0.8	-2.7	332	2.1	1.0	-1.9	307	5.3	4.2	-3.2	286	12.1	11.6	-3.4	276	25.3	25.1	-2.8	271	30.5	30.5	-0.6	260	13.3	13.1	2.3			
3	358	2.3	0.1	-2.3	313	2.3	1.7	-1.6	299	4.7	4.1	-2.3	283	11.5	11.2	-2.6	272	27.9	27.9	-0.8	260	41.5	40.8	7.4	272	26.5	26.5	-1.1			
4	354	3.1	0.3	-3.1	321	2.7	1.7	-2.1	296	5.5	5.0	-2.4	284	13.6	13.2	-3.4	271	35.3	35.3	-0.6	261	42.0	41.5	6.5	280	29.0	28.6	-5.0			
5	5	2.1	-0.2	-2.1	338	3.2	1.2	-3.0	304	6.2	5.1	-3.5	280	13.0	12.8	-2.2	275	28.1	28.0	-2.4	265	29.1	29.0	2.7	257	16.7	16.3	3.7			
6	2	3.2	-0.1	-3.2	343	3.4	1.0	-3.2	304	6.2	5.1	-3.5	285	14.6	14.1	-3.9	273	29.1	29.1	-1.6	277	37.2	36.9	-4.5	282	27.5	26.9	-5.6			
7	332	2.7	1.3	-2.4	327	3.1	1.7	-2.6	299	5.8	5.1	-2.8	285	13.6	13.1	-3.6	267	28.2	28.2	1.5	272	34.1	34.1	-1.4	265	22.5	22.4	2.1			
8	343	2.7	0.8	-2.6	318	2.5	1.7	-1.9	284	4.5	4.4	-1.1	272	14.3	14.3	-0.6	266	28.2	28.1	2.0	259	26.6	26.1	5.1	276	18.0	17.9	-1.8			
9	313	1.9	1.4	-1.3	304	3.0	2.5	-1.7	302	4.5	3.8	-2.4	274	12.5	12.5	-0.9	268	28.1	28.1	1.2	252	34.0	32.4	10.4	275	21.3	21.2	-2.0			
10	323	3.0	1.8	-2.4	315	3.4	2.4	-2.4	300	5.2	4.5	-2.6	289	12.4	11.7	-4.1	270	25.3	25.3	0.1	280	34.3	33.8	-5.9	296	9.3	8.4	-4.1			
11	332	2.4	1.1	-2.1	339	3.1	1.1	-2.9	298	5.5	4.8	-2.6	288	11.6	11.1	-3.5	287	25.7	24.6	-7.6	285	32.0	30.9	-8.2	293	16.5	15.2	-6.3			
12	360	1.9	0.0	-1.9	354	1.9	0.2	-1.9	303	5.3	4.4	-2.9	273	13.4	13.4	-0.6	272	25.2	25.2	-0.8	263	34.7	34.4	4.2	257	21.1	20.5	4.8			
13	336	3.4	1.4	-3.1	329	3.3	1.7	-2.8	313	5.2	3.8	-3.5	294	11.9	10.9	-4.8	276	25.6	25.5	-2.6	268	35.8	35.8	1.5	286	16.4	15.8	-4.4			
14	337	3.8	1.5	-3.5	333	3.5	1.6	-3.1	318	4.7	3.2	-3.5	288	11.5	10.9	-3.6	268	27.3	27.3	1.0	256	38.9	37.8	9.1	281	18.7	18.4	-3.5			
15	344	3.7	1.0	-3.6	336	3.9	1.6	-3.6	309	5.5	4.3	-3.5	284	10.9	10.6	-2.6	264	27.4	27.2	2.9	258	28.7	28.0	6.1	276	19.2	19.1	-2.0			
16	353	3.2	0.4	-3.2	335	4.2	1.8	-3.8	306	5.2	4.2	-3.0	272	12.4	12.4	-0.5	265	28.7	28.6	2.4	261	41.4	40.9	6.6	260	19.0	18.7	3.3			
17	10	1.7	-0.3	-1.7	321	2.1	1.3	-1.6	279	5.4	5.3	-0.8	268	13.2	13.2	0.5	264	28.9	28.7	3.0	264	44.6	44.4	4.5	268	14.0	14.0	0.6			
18	360	2.9	0.0	-2.9	320	3.5	2.3	-2.7	291	7.1	6.6	-2.5	272	17.1	17.1	-0.5	254	33.2	32.0	8.9	269	31.1	31.1	0.8	251	18.5	17.5	6.0			
19	342	1.6	0.5	-1.5	317	3.5	2.4	-2.6	286	6.8	6.5	-1.9	274	15.9	15.9	-1.1	260	31.9	31.4	5.7	251	44.8	42.3	14.9	247	20.0	18.4	7.8			
20	4	3.2	-0.2	-3.2	311	3.8	2.9	-2.5	276	7.0	7.0	-0.7	281	15.2	14.9	-2.8	256	34.5	33.5	8.3	256	36.3	35.2	9.0	258	23.0	22.5	4.9			
21	12	2.4	-0.5	-2.3	326	2.2	1.2	-1.8	277	6.4	6.3	-0.8	268	15.0	15.0	0.5	260	29.1	28.7	5.1	260	40.8	40.2	7.2	274	22.9	22.8	-1.7			
22	16	2.5	-0.7	-2.4	306	2.9	2.3	-1.7	282	6.9	6.8	-1.4	274	15.8	15.8	-1.0	274	26.1	26.0	-1.8	259	39.4	38.7	7.3	281	40.8	40.1	-7.6			
23	337	3.0	1.2	-2.8	295	4.1	3.7	-1.7	295	6.5	5.9	-2.7	275	15.6	15.5	-1.4	272	29.2	29.2	-1.2	262	32.6	32.2	4.8	269	23.8	23.8	0.3			
24	322	4.3	2.7	-3.4	288	1.6	1.5	-0.5	287	6.7	6.4	-2.0	278	14.1	14.0	-1.9	272	28.7	28.7	-0.8	279	27.8	27.5	-4.3	246	22.6	20.7	9.1			
25	302	3.4	2.9	-1.8	284	3.3	3.2	-0.8	282	8.0	7.8	-1.6	276	16.4	16.3	-1.7	272	26.1	26.1	-1.1	277	29.8	29.6	-3.6	275	34.0	33.9	-3.0			
26	321	3.3	2.1	-2.6	312	3.0	2.2	-2.0	278	8.2	8.1	-1.1	276	18.4	18.3	-1.9	269	27.1	27.1	0.5	267	38.7	38.7	1.7	277	31.5	31.3	-3.9			
27	333	2.8	1.3	-2.5	298	4.0	3.5	-1.9	284	11.0	10.7	-2.7	275	19.3	19.2	-1.7	272	39.8	39.8	-1.5	272	38.1	38.1	-1.4	275	34.4	34.3	-3.0			
28	338	2.2	0.8	-2.0	311	4.1	3.1	-2.7	290	7.0	6.6	-2.4	279	17.9	17.7	-2.7	259	31.1	30.6	5.8	260	35.8	35.3	6.2	250	20.6	19.4	7.0			
29	342	2.9	0.9	-2.8	304	3.6	3.0	-2.0	297	8.9	7.9	-4.1	278	18.7	18.5	-2.5	270	36.7	36.7	-0.3	270	41.4	41.4	0.2	270	31.0	31.0	0.2			
30	320	3.5	2.3	-2.7	309	3.3	2.6	-2.1	294	7.3	6.7	-3.0	282	17.1	16.7	-3.7	280	35.2	34.7	-6.2	264	42.1	41.8	4.6	278	33.2	32.8	-4.9			

Daily Normals of Upper Air Winds (1971-2000)

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GWALIOR

DECEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	332	4.3	2.0	-3.8	309	4.3	3.3	-2.7	297	6.8	6.1	-3.1	279	18.5	18.3	-2.8	272	32.8	32.8	-0.9	255	39.9	38.5	10.5	270	18.6	18.6	-0.1			
2	322	3.7	2.3	-2.9	307	3.8	3.0	-2.3	291	6.3	5.9	-2.3	274	17.0	17.0	-1.2	264	30.2	30.0	3.1	259	36.1	35.4	7.2	264	26.6	26.5	2.8			
3	354	1.8	0.2	-1.8	319	3.5	2.3	-2.6	292	6.6	6.1	-2.5	272	16.2	16.2	-0.7	268	33.8	33.8	0.9	268	40.7	40.7	1.3	259	22.0	21.6	4.2			
4	356	2.7	0.2	-2.7	324	4.6	2.7	-3.7	300	8.1	7.0	-4.0	272	16.2	16.2	-0.6	265	33.9	33.8	2.8	270	41.3	41.3	0.3	249	33.0	30.8	11.9			
5	360	2.4	0.0	-2.4	315	4.5	3.2	-3.2	297	7.6	6.8	-3.4	274	15.3	15.3	-1.1	258	32.6	31.9	6.9	255	36.5	35.2	9.7	251	24.9	23.6	7.9			
6	350	2.3	0.4	-2.3	315	4.0	2.8	-2.8	294	7.2	6.6	-2.9	273	14.4	14.4	-0.8	261	32.1	31.7	4.9	263	38.1	37.8	4.8	266	26.9	26.8	1.9			
7	342	4.4	1.4	-4.2	327	4.8	2.6	-4.0	302	5.5	4.7	-2.9	272	13.6	13.6	-0.5	267	29.7	29.7	1.4	257	41.7	40.6	9.7	256	33.7	32.7	8.0			
8	334	3.0	1.3	-2.7	309	3.8	3.0	-2.4	276	7.2	7.2	-0.8	270	15.3	15.3	0.0	263	31.5	31.3	3.8	263	35.2	34.9	4.4	222	18.0	12.1	13.3			
9	323	3.6	2.2	-2.9	318	3.6	2.4	-2.7	290	6.3	5.9	-2.1	272	15.3	15.3	-0.5	259	34.8	34.2	6.4	257	42.4	41.3	9.5	259	36.2	35.5	7.0			
10	331	4.5	2.2	-3.9	312	3.9	2.9	-2.6	291	6.8	6.4	-2.4	281	18.7	18.4	-3.5	268	32.6	32.6	0.9	257	38.1	37.2	8.3	262	18.3	18.1	2.6			
11	333	3.9	1.8	-3.5	319	3.5	2.3	-2.6	297	6.2	5.5	-2.8	282	16.4	16.1	-3.3	275	30.5	30.4	-2.8	261	34.1	33.7	5.5	275	31.0	30.9	-2.7			
12	330	3.4	1.7	-2.9	298	3.4	3.0	-1.6	288	6.6	6.3	-2.1	278	19.4	19.2	-2.6	273	39.1	39.0	-2.0	260	41.7	41.0	7.4	287	29.0	27.8	-8.4			
13	324	2.7	1.6	-2.2	310	3.5	2.7	-2.3	277	8.3	8.2	-1.0	269	17.9	17.9	0.2	269	32.3	32.3	0.8	256	31.9	31.0	7.5	261	30.3	29.9	4.8			
14	310	3.8	2.9	-2.4	299	3.1	2.7	-1.5	276	10.9	10.8	-1.1	270	20.6	20.6	-0.1	267	36.5	36.5	1.7	267	41.0	41.0	2.0	261	36.4	36.0	5.7			
15	327	2.4	1.3	-2.0	307	3.9	3.1	-2.3	296	8.8	7.9	-3.8	282	18.9	18.5	-4.1	279	34.9	34.5	-5.5	283	40.8	39.7	-9.4	276	32.1	31.9	-3.3			
16	339	2.2	0.8	-2.1	280	2.7	2.7	-0.5	278	7.5	7.4	-1.1	276	17.5	17.4	-1.7	273	36.6	36.6	-1.6	260	37.2	36.6	6.6	270	23.2	23.2	0.2			
17	333	3.1	1.4	-2.8	309	4.0	3.1	-2.5	301	10.0	8.6	-5.2	270	17.8	17.8	-0.1	271	35.5	35.5	-0.7	267	38.1	38.0	2.2	274	16.8	16.8	-1.2			
18	343	2.4	0.7	-2.3	312	4.2	3.1	-2.8	286	8.5	8.2	-2.3	278	13.2	13.1	-1.9	271	32.0	32.0	-0.8	271	33.4	33.4	-0.8	281	30.0	29.5	-5.5			
19	328	3.4	1.8	-2.9	300	4.8	4.2	-2.4	295	8.2	7.4	-3.5	280	14.8	14.6	-2.5	279	36.6	36.2	-5.7	262	46.2	45.7	6.7	286	48.4	46.6	-13.2			
20	316	2.8	1.9	-2.0	302	4.6	3.9	-2.4	293	8.1	7.4	-3.2	288	20.9	19.9	-6.4	282	31.3	30.6	-6.7	267	35.1	35.1	1.8	263	20.0	19.9	2.4			
21	326	2.5	1.4	-2.1	310	3.3	2.5	-2.1	292	7.2	6.7	-2.7	280	17.1	16.8	-3.1	266	39.3	39.2	2.9	272	42.5	42.5	-1.2	270	31.6	31.6	0.2			
22	345	2.0	0.5	-1.9	293	2.8	2.6	-1.1	293	7.7	7.1	-3.0	283	17.6	17.2	-3.9	273	33.1	33.1	-1.8	267	39.5	39.5	1.9	266	18.0	18.0	1.3			
23	333	2.5	1.1	-2.2	292	3.5	3.2	-1.3	279	7.4	7.3	-1.1	276	17.8	17.7	-1.8	263	39.1	38.8	5.1	274	47.4	47.3	-3.0	274	39.2	39.1	-2.4			
24	11	2.0	-0.4	-2.0	303	3.0	2.5	-1.6	275	7.9	7.9	-0.7	282	14.8	14.5	-3.1	273	31.9	31.9	-1.7	268	43.2	43.2	1.8	258	31.6	30.9	6.7			
25	4	2.8	-0.2	-2.8	327	2.7	1.5	-2.3	272	5.6	5.6	-0.2	271	18.1	18.1	-0.3	276	35.8	35.6	-3.6	268	42.2	42.2	1.2	258	27.2	26.6	5.7			
26	344	1.8	0.5	-1.7	283	2.7	2.6	-0.6	282	7.4	7.2	-1.5	272	16.7	16.7	-0.7	272	35.7	35.7	-1.4	268	35.3	35.3	1.3	275	27.5	27.4	-2.2			
27	39	1.4	-0.9	-1.1	295	2.9	2.6	-1.2	274	8.7	8.7	-0.6	274	18.6	18.6	-1.3	272	41.4	41.4	-1.3	267	39.6	39.5	2.1	258	33.3	32.6	7.0			
28	27	0.9	-0.4	-0.8	279	3.1	3.1	-0.5	290	7.7	7.2	-2.6	279	19.2	18.9	-3.1	267	26.5	26.5	1.2	252	37.0	35.2	11.4	—	—	—	—			
29	309	0.6	0.5	-0.4	286	3.5	3.4	-1.0	271	9.6	9.6	-0.2	270	19.9	19.9	-0.1	274	28.1	28.0	-2.0	270	31.6	31.6	-0.2	277	25.7	25.5	-3.0			
30	348	2.5	0.5	-2.4	297	4.2	3.7	-1.9	285	9.7	9.4	-2.5	284	21.3	20.7	-5.2	272	32.3	32.3	-1.3	267	45.8	45.7	2.2	276	19.6	19.5	-2.1			
31	345	1.1	0.3	-1.1	305	3.5	2.9	-2.0	286	8.4	8.1	-2.3	277	18.7	18.5	-2.4	283	37.5	36.5	-8.5	280	37.0	36.4	-6.5	260	28.9	28.5	5.0			

Daily Normals of Upper Air Winds (1971-2000)

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HYDERABAD

JANUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	106	4.8	-4.6	1.3	87	1.9	-1.9	-0.1	290	2.7	2.5	-0.9	272	8.8	8.8	-0.3	267	19.3	19.3	0.9	257	20.8	20.2	4.8	260	8.2	8.1	1.4			
2	96	2.0	-2.0	0.2	84	1.0	-1.0	-0.1	290	3.7	3.5	-1.3	278	11.4	11.3	-1.5	268	20.6	20.6	0.6	257	23.3	22.7	5.4	259	10.8	10.6	2.0			
3	103	2.7	-2.6	0.6	66	2.0	-1.8	-0.8	309	3.2	2.5	-2.0	279	9.1	9.0	-1.4	269	17.5	17.5	0.4	261	21.3	21.0	3.4	264	13.5	13.4	1.4			
4	99	3.6	-3.6	0.6	90	2.3	-2.3	0.0	317	2.3	1.6	-1.7	280	8.1	8.0	-1.4	260	18.1	17.8	3.0	249	20.4	19.0	7.4	253	10.4	10.0	3.0			
5	96	3.6	-3.6	0.4	88	2.3	-2.3	-0.1	290	2.3	2.2	-0.8	280	8.5	8.4	-1.5	266	17.9	17.8	1.4	252	20.0	19.0	6.3	256	14.0	13.6	3.3			
6	106	4.3	-4.1	1.2	99	2.0	-2.0	0.3	286	2.6	2.5	-0.7	276	9.0	8.9	-1.0	264	20.5	20.4	2.3	260	23.2	22.9	4.0	281	14.4	14.1	-2.8			
7	101	3.3	-3.2	0.6	114	2.4	-2.2	1.0	272	2.4	2.4	-0.1	277	10.0	9.9	-1.2	263	19.2	19.1	2.3	258	25.0	24.4	5.3	253	11.5	11.0	3.4			
8	124	2.5	-2.1	1.4	108	1.9	-1.8	0.6	282	2.5	2.4	-0.5	273	9.5	9.5	-0.5	263	22.0	21.9	2.5	257	23.4	22.8	5.4	260	11.4	11.2	2.0			
9	95	3.3	-3.3	0.3	94	2.6	-2.6	0.2	263	2.4	2.4	0.3	264	10.7	10.6	1.1	257	19.6	19.1	4.3	256	20.8	20.2	5.0	263	10.2	10.1	1.3			
10	117	3.9	-3.5	1.8	120	2.4	-2.1	1.2	244	3.0	2.7	1.3	260	12.3	12.1	2.2	260	21.7	21.4	3.7	250	22.2	20.9	7.6	275	12.4	12.4	-1.1			
11	134	4.2	-3.0	2.9	150	2.2	-1.1	1.9	255	3.4	3.3	0.9	275	11.8	11.8	-1.0	258	22.6	22.1	4.5	251	24.8	23.4	8.1	263	12.8	12.7	1.5			
12	102	3.4	-3.3	0.7	128	1.8	-1.4	1.1	269	3.9	3.9	0.1	275	10.7	10.7	-0.9	261	21.5	21.2	3.3	251	22.9	21.6	7.5	259	11.8	11.6	2.3			
13	90	2.7	-2.7	0.0	90	1.2	-1.2	0.0	278	4.4	4.4	-0.6	273	9.7	9.7	-0.5	267	22.4	22.4	1.1	255	25.8	24.9	6.9	261	14.3	14.1	2.2			
14	117	2.9	-2.6	1.3	128	1.8	-1.4	1.1	272	3.5	3.5	-0.1	267	11.0	11.0	0.5	264	23.4	23.3	2.4	256	25.3	24.5	6.3	262	12.6	12.5	1.8			
15	141	2.1	-1.3	1.6	135	1.8	-1.3	1.3	257	4.7	4.6	1.1	269	12.6	12.6	0.3	263	25.7	25.5	3.0	246	25.3	23.2	10.2	272	13.9	13.9	-0.6			
16	113	3.3	-3.0	1.3	104	2.1	-2.0	0.5	298	3.6	3.2	-1.7	273	10.5	10.5	-0.5	267	21.8	21.8	1.2	256	25.5	24.8	6.0	264	10.2	10.2	1.0			
17	105	2.7	-2.6	0.7	87	2.2	-2.2	-0.1	280	2.8	2.8	-0.5	267	11.0	11.0	0.6	260	22.8	22.4	4.1	260	21.7	21.4	3.7	259	9.3	9.1	1.7			
18	99	4.0	-4.0	0.6	106	1.8	-1.7	0.5	292	3.7	3.4	-1.4	277	11.7	11.6	-1.4	261	22.5	22.2	3.6	262	21.3	21.1	3.0	270	10.6	10.6	0.0			
19	111	2.6	-2.4	0.9	125	1.6	-1.3	0.9	283	4.5	4.4	-1.0	282	11.0	10.8	-2.2	269	23.7	23.7	0.3	261	23.2	22.9	3.7	257	12.0	11.7	2.8			
20	113	2.3	-2.1	0.9	114	1.2	-1.1	0.5	282	4.7	4.6	-1.0	284	10.5	10.2	-2.5	268	21.6	21.6	0.6	255	21.7	21.0	5.6	264	12.3	12.2	1.3			
21	123	2.4	-2.0	1.3	101	1.6	-1.6	0.3	280	3.9	3.8	-0.7	273	11.1	11.1	-0.6	266	19.3	19.2	1.4	250	20.8	19.5	7.2	250	11.8	11.1	4.0			
22	105	2.0	-1.9	0.5	106	1.9	-1.8	0.5	292	4.1	3.8	-1.5	280	10.0	9.8	-1.8	267	20.3	20.3	1.1	254	21.2	20.4	5.8	266	13.3	13.3	1.0			
23	117	2.7	-2.4	1.2	113	1.3	-1.2	0.5	299	3.1	2.7	-1.5	278	10.4	10.3	-1.4	271	20.5	20.5	-0.4	262	22.7	22.5	3.3	263	7.8	7.7	0.9			
24	95	4.4	-4.4	0.4	98	2.2	-2.2	0.3	299	3.1	2.7	-1.5	282	10.6	10.4	-2.2	273	20.5	20.5	-0.9	261	20.0	19.7	3.2	246	9.2	8.4	3.7			
25	96	4.0	-4.0	0.4	88	2.6	-2.6	-0.1	322	1.8	1.1	-1.4	284	9.6	9.3	-2.3	274	19.5	19.5	-1.3	259	23.1	22.7	4.4	269	9.0	9.0	0.2			
26	93	3.6	-3.6	0.2	87	2.1	-2.1	-0.1	329	2.7	1.4	-2.3	276	8.8	8.8	-0.9	269	18.5	18.5	0.3	252	19.9	18.9	6.2	248	9.9	9.2	3.7			
27	98	4.3	-4.3	0.6	92	2.7	-2.7	0.1	342	2.2	0.7	-2.1	281	9.9	9.7	-1.8	261	18.9	18.7	3.0	248	21.9	20.4	8.1	260	9.1	9.0	1.6			
28	103	4.1	-4.0	0.9	85	2.2	-2.2	-0.2	306	2.6	2.1	-1.5	280	10.3	10.1	-1.8	263	17.9	17.8	2.3	253	20.0	19.1	5.9	261	8.7	8.6	1.4			
29	95	4.4	-4.4	0.4	79	2.5	-2.5	-0.5	322	3.1	1.9	-2.4	282	9.4	9.2	-1.9	272	17.9	17.9	-0.7	259	20.4	20.0	3.9	265	10.9	10.9	0.9			
30	112	2.4	-2.2	0.9	93	1.7	-1.7	0.1	305	3.3	2.7	-1.9	277	10.4	10.3	-1.3	264	19.4	19.3	1.9	258	21.4	21.0	4.3	258	13.1	12.8	2.8			
31	144	2.4	-1.4	1.9	139	1.8	-1.2	1.4	294	4.4	4.0	-1.8	280	12.1	11.9	-2.1	272	20.1	20.1	-0.6	266	21.2	21.2	1.4	284	12.9	12.5	-3.1			

Daily Normals of Upper Air Winds (1971-2000)

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HYDERABAD

FEBRUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	106	4.3	-4.1	1.2	121	1.2	-1.0	0.6	280	4.7	4.6	-0.8	273	12.8	12.8	-0.6	265	22.0	21.9	2.1	259	25.1	24.7	4.6	255	9.0	8.7	2.4			
2	124	2.7	-2.2	1.5	138	1.3	-0.9	1.0	274	3.9	3.9	-0.3	276	10.9	10.8	-1.2	267	22.0	22.0	1.2	254	24.7	23.7	6.8	263	11.9	11.8	1.5			
3	121	3.5	-3.0	1.8	138	1.5	-1.0	1.1	284	4.9	4.7	-1.2	276	12.2	12.1	-1.2	273	22.6	22.6	-1.2	261	23.4	23.1	3.7	267	12.8	12.8	0.6			
4	114	3.9	-3.6	1.6	149	1.2	-0.6	1.0	276	4.4	4.4	-0.5	275	12.7	12.7	-1.0	273	23.9	23.9	-1.4	268	23.9	23.9	1.0	273	12.0	12.0	-0.7			
5	143	2.6	-1.6	2.1	90	0.9	-0.9	0.0	271	4.3	4.3	-0.1	274	11.7	11.7	-0.8	265	22.0	21.9	1.9	267	23.1	23.1	1.3	273	10.8	10.8	-0.6			
6	120	3.4	-2.9	1.7	117	2.2	-2.0	1.0	279	3.2	3.2	-0.5	275	11.6	11.5	-1.1	265	24.4	24.3	2.0	262	24.4	24.2	3.3	270	14.7	14.7	0.0			
7	121	3.3	-2.8	1.7	144	0.9	-0.5	0.7	288	3.6	3.4	-1.1	286	11.3	10.9	-3.1	269	21.9	21.9	0.4	272	22.7	22.7	-0.8	261	12.0	11.8	1.9			
8	135	1.0	-0.7	0.7	113	0.8	-0.7	0.3	275	4.2	4.2	-0.4	285	12.7	12.3	-3.2	263	24.6	24.4	3.0	258	21.3	20.9	4.3	281	9.6	9.4	-1.9			
9	135	0.8	-0.6	0.6	110	1.2	-1.1	0.4	285	3.0	2.9	-0.8	282	12.8	12.5	-2.7	273	22.8	22.8	-1.2	263	23.7	23.5	2.9	273	12.3	12.3	-0.7			
10	106	2.6	-2.5	0.7	98	1.4	-1.4	0.2	295	4.5	4.1	-1.9	285	10.7	10.3	-2.8	281	19.1	18.7	-3.7	266	19.3	19.3	1.3	279	8.6	8.5	-1.4			
11	132	3.0	-2.2	2.0	143	1.5	-0.9	1.2	285	3.5	3.4	-0.9	279	10.1	10.0	-1.6	279	18.9	18.6	-3.1	266	20.7	20.6	1.6	259	11.7	11.5	2.3			
12	139	3.2	-2.1	2.4	122	1.3	-1.1	0.7	288	2.9	2.8	-0.9	276	9.3	9.3	-0.9	271	19.4	19.4	-0.4	255	22.1	21.4	5.7	250	9.7	9.1	3.3			
13	104	3.3	-3.2	0.8	138	1.3	-0.9	1.0	247	2.1	1.9	0.8	264	10.6	10.5	1.1	268	21.1	21.1	0.8	254	21.4	20.6	5.8	251	10.3	9.8	3.3			
14	140	2.3	-1.5	1.8	147	2.0	-1.1	1.7	266	4.0	4.0	0.3	264	11.6	11.5	1.3	267	22.4	22.4	1.2	255	21.8	21.0	5.8	265	10.8	10.8	1.0			
15	152	2.6	-1.2	2.3	183	2.1	0.1	2.1	277	4.0	4.0	-0.5	269	12.7	12.7	0.2	265	22.8	22.7	1.8	255	23.0	22.2	6.0	254	9.6	9.2	2.7			
16	104	0.8	-0.8	0.2	184	1.4	0.1	1.4	257	4.5	4.4	1.0	271	13.4	13.4	-0.2	259	22.8	22.4	4.2	250	23.1	21.7	8.0	260	11.8	11.6	2.1			
17	171	1.8	-0.3	1.8	180	1.5	0.0	1.5	262	4.5	4.5	0.6	266	14.5	14.5	0.9	267	21.0	21.0	1.1	252	21.3	20.3	6.5	256	13.3	12.9	3.1			
18	167	2.2	-0.5	2.1	158	1.6	-0.6	1.5	249	3.6	3.4	1.3	277	12.7	12.6	-1.6	260	20.9	20.6	3.8	252	21.7	20.7	6.6	268	11.1	11.1	0.3			
19	135	3.0	-2.1	2.1	159	1.7	-0.6	1.6	268	5.1	5.1	0.2	274	11.5	11.5	-0.9	265	19.3	19.2	1.6	254	21.7	20.9	6.0	269	10.4	10.4	0.2			
20	186	2.7	0.3	2.7	119	1.0	-0.9	0.5	270	4.6	4.6	0.0	277	11.5	11.4	-1.5	266	20.2	20.2	1.3	257	19.3	18.8	4.3	282	10.1	9.9	-2.1			
21	182	2.6	0.1	2.6	132	1.5	-1.1	1.0	283	3.1	3.0	-0.7	276	11.0	10.9	-1.1	259	20.1	19.8	3.7	259	20.7	20.3	3.9	271	9.2	9.2	-0.1			
22	143	2.0	-1.2	1.6	115	2.1	-1.9	0.9	281	3.2	3.1	-0.6	283	10.7	10.4	-2.4	265	20.3	20.2	1.8	261	19.9	19.7	3.1	272	11.1	11.1	-0.3			
23	117	2.8	-2.5	1.3	123	2.0	-1.7	1.1	280	2.2	2.2	-0.4	278	9.9	9.8	-1.4	274	19.4	19.3	-1.4	265	20.1	20.0	1.7	275	9.7	9.7	-0.8			
24	116	3.4	-3.1	1.5	97	1.6	-1.6	0.2	292	2.4	2.2	-0.9	274	9.2	9.2	-0.7	268	18.0	18.0	0.6	259	19.6	19.2	3.9	269	9.7	9.7	0.1			
25	127	1.5	-1.2	0.9	72	1.3	-1.2	-0.4	305	2.1	1.7	-1.2	277	10.2	10.1	-1.3	264	18.8	18.7	2.0	260	21.1	20.8	3.6	272	13.3	13.3	-0.4			
26	99	1.3	-1.3	0.2	112	0.5	-0.5	0.2	307	2.1	1.7	-1.3	275	9.5	9.5	-0.8	266	19.5	19.4	1.5	262	20.5	20.3	2.7	266	10.3	10.3	0.7			
27	104	1.6	-1.6	0.4	124	1.4	-1.2	0.8	311	2.0	1.5	-1.3	283	9.6	9.3	-2.2	264	20.8	20.7	2.3	262	20.6	20.4	2.9	254	10.6	10.2	2.9			
28	152	1.7	-0.8	1.5	117	1.1	-1.0	0.5	289	2.4	2.3	-0.8	278	8.9	8.8	-1.2	270	19.4	19.4	0.0	263	20.1	19.9	2.6	257	11.9	11.6	2.6			
29	106	3.7	-3.6	1.0	113	2.3	-2.1	0.9	356	1.4	0.1	-1.4	285	8.4	8.1	-2.2	267	18.2	18.2	0.8	243	20.3	18.1	9.2	260	12.1	11.9	2.0			

Daily Normals of Upper Air Winds (1971-2000)

147

HYDERABAD

MARCH

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	111	2.6	-2.4	0.9	73	1.0	-1.0	-0.3	306	1.4	1.1	-0.8	281	9.6	9.4	-1.8	265	17.8	17.7	1.5	256	21.5	20.9	5.2	267	10.8	10.8	0.5			
2	97	4.3	-4.3	0.5	90	1.3	-1.3	0.0	298	2.4	2.1	-1.1	280	9.0	8.9	-1.5	270	18.5	18.5	-0.1	263	20.3	20.2	2.4	262	7.4	7.3	1.0			
3	105	2.3	-2.2	0.6	87	1.7	-1.7	-0.1	320	2.5	1.6	-1.9	296	8.1	7.3	-3.6	274	17.7	17.7	-1.2	259	20.0	19.6	3.8	262	8.9	8.8	1.3			
4	106	2.6	-2.5	0.7	96	2.0	-2.0	0.2	310	1.6	1.2	-1.0	283	7.0	6.8	-1.6	266	17.1	17.1	1.3	258	19.3	18.9	4.0	266	8.1	8.1	0.5			
5	117	2.9	-2.6	1.3	131	2.1	-1.6	1.4	300	1.4	1.2	-0.7	278	9.0	8.9	-1.2	267	17.4	17.4	0.8	254	20.4	19.6	5.8	264	10.9	10.8	1.1			
6	161	2.8	-0.9	2.6	156	2.0	-0.8	1.8	283	1.8	1.8	-0.4	275	8.9	8.9	-0.8	259	18.2	17.9	3.4	261	19.6	19.4	3.1	265	8.8	8.8	0.8			
7	106	1.9	-1.8	0.5	126	2.2	-1.8	1.3	263	1.7	1.7	0.2	271	8.3	8.3	-0.2	267	18.3	18.3	0.9	264	18.7	18.6	1.8	267	10.7	10.7	0.5			
8	139	1.8	-1.2	1.4	142	1.8	-1.1	1.4	279	2.0	2.0	-0.3	275	8.7	8.7	-0.7	267	18.8	18.8	1.1	264	21.9	21.8	2.4	258	8.9	8.7	1.8			
9	189	1.9	0.3	1.9	119	1.8	-1.6	0.9	303	1.7	1.4	-0.9	278	7.2	7.1	-1.0	270	18.5	18.5	-0.1	261	21.1	20.8	3.3	263	13.3	13.2	1.6			
10	112	1.8	-1.7	0.7	132	1.5	-1.1	1.0	256	1.2	1.2	0.3	265	9.4	9.4	0.8	271	21.2	21.2	-0.5	257	21.0	20.4	4.8	276	8.5	8.5	-0.9			
11	140	2.6	-1.7	2.0	141	1.3	-0.8	1.0	288	2.5	2.4	-0.8	268	9.9	9.9	0.3	263	21.0	20.8	2.6	260	24.3	23.9	4.2	257	13.0	12.7	3.0			
12	151	2.5	-1.2	2.2	63	1.6	-1.4	-0.7	280	2.8	2.8	-0.5	279	10.6	10.5	-1.7	267	21.3	21.3	1.2	264	21.5	21.4	2.2	265	12.8	12.7	1.2			
13	153	1.3	-0.6	1.2	107	1.4	-1.3	0.4	278	1.5	1.5	-0.2	281	8.0	7.9	-1.5	272	21.1	21.1	-0.8	265	22.4	22.3	2.1	271	11.3	11.3	-0.2			
14	145	1.6	-0.9	1.3	103	2.3	-2.2	0.5	295	1.4	1.3	-0.6	286	7.1	6.8	-2.0	274	18.7	18.6	-1.4	268	22.1	22.1	0.7	272	14.1	14.1	-0.4			
15	127	4.3	-3.4	2.6	117	1.8	-1.6	0.8	302	1.3	1.1	-0.7	288	5.4	5.1	-1.7	273	14.6	14.6	-0.8	269	17.9	17.9	0.4	286	9.4	9.0	-2.6			
16	140	3.9	-2.5	3.0	145	2.1	-1.2	1.7	317	1.6	1.1	-1.2	277	7.0	7.0	-0.8	261	15.1	14.9	2.3	257	18.6	18.1	4.3	262	9.1	9.0	1.3			
17	143	3.1	-1.9	2.5	135	1.3	-0.9	0.9	288	1.3	1.2	-0.4	266	7.1	7.1	0.5	261	19.0	18.8	2.9	252	22.4	21.3	6.9	260	10.6	10.4	1.8			
18	81	2.0	-2.0	-0.3	143	1.5	-0.9	1.2	281	2.0	2.0	-0.4	281	8.6	8.4	-1.6	263	16.8	16.7	2.0	256	19.7	19.1	4.7	259	10.4	10.2	1.9			
19	81	2.5	-2.5	-0.4	90	0.5	-0.5	0.0	275	2.1	2.1	-0.2	287	7.3	7.0	-2.1	265	16.3	16.2	1.3	257	18.7	18.2	4.2	255	7.3	7.0	1.9			
20	104	1.6	-1.6	0.4	153	1.1	-0.5	1.0	281	2.1	2.1	-0.4	286	7.1	6.8	-1.9	264	16.5	16.4	1.8	257	19.3	18.8	4.5	271	11.0	11.0	-0.2			
21	126	1.9	-1.5	1.1	114	1.7	-1.6	0.7	257	1.7	1.7	0.4	287	7.1	6.8	-2.1	273	15.7	15.7	-0.9	266	19.2	19.2	1.3	269	8.8	8.8	0.2			
22	122	2.6	-2.2	1.4	124	2.3	-1.9	1.3	284	1.6	1.6	-0.4	289	7.1	6.7	-2.3	273	16.8	16.8	-1.0	259	20.0	19.6	3.9	256	7.5	7.3	1.8			
23	107	2.7	-2.6	0.8	123	1.7	-1.4	0.9	263	2.6	2.6	0.3	294	7.0	6.4	-2.9	271	17.0	17.0	-0.2	261	22.3	22.0	3.6	265	9.5	9.5	0.9			
24	146	2.3	-1.3	1.9	127	1.5	-1.2	0.9	267	2.1	2.1	0.1	274	8.1	8.1	-0.6	261	17.6	17.4	2.9	260	23.4	23.1	3.9	265	11.4	11.4	0.9			
25	128	4.2	-3.3	2.6	131	1.8	-1.4	1.2	260	2.3	2.3	0.4	284	7.3	7.1	-1.8	271	17.3	17.3	-0.4	261	22.2	21.9	3.6	261	10.5	10.4	1.7			
26	110	2.3	-2.2	0.8	115	1.4	-1.3	0.6	287	2.4	2.3	-0.7	287	6.2	5.9	-1.8	271	18.1	18.1	-0.4	259	23.7	23.3	4.6	272	9.8	9.8	-0.3			
27	52	1.1	-0.9	-0.7	98	1.5	-1.5	0.2	307	2.0	1.6	-1.2	302	5.2	4.4	-2.7	272	16.8	16.8	-0.5	266	20.1	20.1	1.4	292	6.1	5.7	-2.3			
28	133	2.6	-1.9	1.8	112	1.6	-1.5	0.6	336	2.0	0.8	-1.8	301	5.5	4.7	-2.8	286	16.4	15.8	-4.4	271	19.8	19.8	-0.4	275	6.4	6.4	-0.6			
29	176	1.6	-0.1	1.6	117	0.7	-0.6	0.3	309	1.3	1.0	-0.8	294	5.7	5.2	-2.3	283	14.5	14.1	-3.3	261	19.6	19.4	3.0	263	5.0	5.0	0.6			
30	60	0.8	-0.7	-0.4	48	1.3	-1.0	-0.9	315	1.1	0.8	-0.8	293	5.7	5.3	-2.2	268	14.1	14.1	0.6	265	18.2	18.1	1.6	262	4.9	4.9	0.7			
31	90	1.4	-1.4	0.0	32	0.9	-0.5	-0.8	346	0.8	0.2	-0.8	287	5.3	5.1	-1.6	259	15.7	15.4	2.9	252	17.0	16.2	5.2	263	8.5	8.4	1.1			

Daily Normals of Upper Air Winds (1971-2000)

148

HYDERABAD

APRIL

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	128	3.3	-2.6	2.0	107	1.7	-1.6	0.5	270	0.6	0.6	0.0	292	5.9	5.5	-2.2	267	13.0	13.0	0.6	257	16.6	16.2	3.8	279	6.8	6.7	-1.1			
2	115	4.5	-4.1	1.9	105	2.3	-2.2	0.6	306	0.9	0.7	-0.5	284	5.7	5.5	-1.4	260	14.2	14.0	2.4	254	15.3	14.7	4.2	257	3.9	3.8	0.9			
3	139	4.4	-2.9	3.3	118	1.5	-1.3	0.7	90	0.1	-0.1	0.0	262	5.8	5.7	0.8	262	16.7	16.5	2.3	254	20.5	19.7	5.8	244	7.9	7.1	3.5			
4	128	1.8	-1.4	1.1	120	1.6	-1.4	0.8	333	0.7	0.3	-0.6	265	5.2	5.2	0.5	267	18.4	18.4	1.0	261	20.4	20.2	3.1	243	8.0	7.1	3.6			
5	145	5.4	-3.1	4.4	110	1.5	-1.4	0.5	252	2.0	1.9	0.6	265	6.5	6.5	0.6	270	15.9	15.9	0.1	255	20.3	19.6	5.3	251	6.4	6.0	2.1			
6	104	4.6	-4.5	1.1	93	2.0	-2.0	0.1	293	0.8	0.7	-0.3	295	5.4	4.9	-2.3	271	14.8	14.8	-0.2	259	19.7	19.4	3.6	248	6.2	5.8	2.3			
7	107	3.4	-3.2	1.0	96	1.0	-1.0	0.1	315	1.1	0.8	-0.8	297	5.7	5.1	-2.6	280	15.8	15.6	-2.8	264	17.1	17.0	1.7	253	6.6	6.3	1.9			
8	51	1.4	-1.1	-0.9	101	0.5	-0.5	0.1	300	1.4	1.2	-0.7	282	5.4	5.3	-1.1	269	15.7	15.7	0.2	255	18.0	17.4	4.5	257	7.8	7.6	1.7			
9	63	1.3	-1.2	-0.6	81	0.6	-0.6	-0.1	225	1.3	0.9	0.9	291	6.6	6.1	-2.4	262	14.8	14.7	2.0	255	19.4	18.8	4.9	257	8.3	8.1	1.8			
10	102	3.5	-3.4	0.7	112	1.1	-1.0	0.4	261	1.9	1.9	0.3	286	5.5	5.3	-1.5	268	14.1	14.1	0.5	258	17.7	17.3	3.6	268	8.4	8.4	0.3			
11	116	3.0	-2.7	1.3	124	0.7	-0.6	0.4	351	0.6	0.1	-0.6	285	4.8	4.6	-1.2	266	13.6	13.6	1.0	265	18.7	18.6	1.5	250	6.4	6.0	2.2			
12	96	3.9	-3.9	0.4	107	1.4	-1.3	0.4	313	2.1	1.5	-1.4	281	3.8	3.7	-0.7	276	10.8	10.7	-1.1	261	13.1	12.9	2.0	246	3.9	3.6	1.6			
13	128	2.4	-1.9	1.5	105	1.1	-1.1	0.3	323	1.0	0.6	-0.8	289	5.6	5.3	-1.8	267	13.8	13.8	0.7	253	15.6	14.9	4.5	271	5.5	5.5	-0.1			
14	135	2.4	-1.7	1.7	122	1.3	-1.1	0.7	56	0.4	-0.3	-0.2	285	5.5	5.3	-1.4	252	11.9	11.3	3.6	249	16.6	15.5	6.0	260	4.0	3.9	0.7			
15	109	3.9	-3.7	1.3	113	1.5	-1.4	0.6	315	1.3	0.9	-0.9	271	4.4	4.4	-0.1	259	14.6	14.3	2.9	250	17.3	16.3	5.8	263	3.8	3.8	0.5			
16	149	0.6	-0.3	0.5	140	0.8	-0.5	0.6	292	1.8	1.7	-0.7	279	5.5	5.4	-0.9	259	15.6	15.3	2.9	253	18.4	17.6	5.4	267	7.6	7.6	0.4			
17	133	3.7	-2.7	2.5	18	0.6	-0.2	-0.6	315	2.0	1.4	-1.4	300	4.3	3.7	-2.1	262	11.5	11.4	1.7	252	16.9	16.1	5.3	273	3.3	3.3	-0.2			
18	113	2.1	-1.9	0.8	85	1.1	-1.1	-0.1	18	1.6	-0.5	-1.5	297	4.2	3.8	-1.9	262	12.6	12.5	1.7	248	17.7	16.4	6.7	257	2.6	2.5	0.6			
19	14	1.2	-0.3	-1.2	53	0.5	-0.4	-0.3	338	1.8	0.7	-1.7	305	4.4	3.6	-2.5	253	15.4	14.7	4.5	242	22.5	19.9	10.5	235	3.2	2.6	1.8			
20	124	2.3	-1.9	1.3	81	1.2	-1.2	-0.2	8	0.7	-0.1	-0.7	291	4.2	3.9	-1.5	258	14.5	14.2	3.1	245	18.9	17.2	7.9	234	5.7	4.6	3.3			
21	150	2.8	-1.4	2.4	119	1.0	-0.9	0.5	13	1.3	-0.3	-1.3	291	4.5	4.2	-1.6	257	14.5	14.1	3.3	246	19.4	17.7	7.9	254	4.6	4.4	1.3			
22	122	0.9	-0.8	0.5	72	0.9	-0.9	-0.3	40	0.8	-0.5	-0.6	288	4.2	4.0	-1.3	255	13.9	13.5	3.5	253	18.9	18.1	5.6	266	4.0	4.0	0.3			
23	90	1.9	-1.9	0.0	72	0.6	-0.6	-0.2	8	1.4	-0.2	-1.4	278	4.5	4.5	-0.6	254	14.9	14.3	4.2	248	16.5	15.3	6.3	215	2.1	1.2	1.7			
24	142	2.4	-1.5	1.9	78	1.4	-1.4	-0.3	7	1.6	-0.2	-1.6	310	6.0	4.6	-3.8	257	12.1	11.8	2.7	253	18.9	18.0	5.6	262	2.1	2.1	0.3			
25	94	1.4	-1.4	0.1	45	0.7	-0.5	-0.5	349	1.6	0.3	-1.6	306	4.4	3.6	-2.6	257	13.9	13.6	3.1	247	15.8	14.6	6.1	245	2.9	2.6	1.2			
26	108	2.3	-2.2	0.7	108	0.9	-0.9	0.3	336	1.7	0.7	-1.6	302	4.7	4.0	-2.5	272	8.9	8.9	-0.3	250	11.6	10.9	4.0	320	0.8	0.5	-0.6			
27	352	1.5	0.2	-1.5	7	1.7	-0.2	-1.7	3	3.5	-0.2	-3.5	336	4.3	1.7	-3.9	282	8.5	8.3	-1.8	250	10.1	9.5	3.5	65	2.6	-2.4	-1.1			
28	67	0.8	-0.7	-0.3	7	0.8	-0.1	-0.8	357	1.8	0.1	-1.8	318	5.1	3.4	-3.8	279	10.2	10.1	-1.6	256	12.3	11.9	3.0	100	1.7	-1.7	0.3			
29	60	1.6	-1.4	-0.8	37	1.5	-0.9	-1.2	351	2.4	0.4	-2.4	323	5.5	3.3	-4.4	282	11.0	10.8	-2.3	262	12.7	12.6	1.8	92	2.8	-2.8	0.1			
30	317	1.6	1.1	-1.2	11	1.5	-0.3	-1.5	351	1.9	0.3	-1.9	325	4.7	2.7	-3.8	274	10.5	10.5	-0.8	254	11.2	10.8	3.1	141	2.1	-1.3	1.6			

Daily Normals of Upper Air Winds (1971-2000)

HYDERABAD

MAY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	172	0.7	-0.1	0.7	78	1.4	-1.4	-0.3	5	2.5	-0.2	-2.5	307	4.4	3.5	-2.6	272	11.0	11.0	-0.3	244	13.2	11.9	5.7	106	1.9	-1.8	0.5			
2	162	0.9	-0.3	0.9	360	0.6	0.0	-0.6	353	2.3	0.3	-2.3	298	5.0	4.4	-2.3	270	10.6	10.6	0.0	244	11.4	10.2	5.0	191	3.3	0.6	3.2			
3	80	1.1	-1.1	-0.2	58	0.9	-0.8	-0.5	8	1.4	-0.2	-1.4	287	4.4	4.2	-1.3	267	10.7	10.7	0.5	257	13.7	13.3	3.1	166	2.9	-0.7	2.8			
4	104	2.5	-2.4	0.6	11	0.5	-0.1	-0.5	355	2.1	0.2	-2.1	288	4.3	4.1	-1.3	257	12.0	11.7	2.7	246	14.0	12.8	5.7	146	4.6	-2.6	3.8			
5	99	2.0	-2.0	0.3	35	1.6	-0.9	-1.3	344	3.2	0.9	-3.1	324	4.9	2.9	-4.0	261	10.2	10.1	1.6	244	11.5	10.3	5.1	113	4.9	-4.5	1.9			
6	162	1.9	-0.6	1.8	42	1.5	-1.0	-1.1	21	3.1	-1.1	-2.9	332	4.2	2.0	-3.7	261	9.5	9.4	1.5	248	10.6	9.9	3.9	97	6.8	-6.8	0.8			
7	90	4.7	-4.7	0.0	62	2.7	-2.4	-1.3	29	2.9	-1.4	-2.5	14	3.6	-0.9	-3.5	269	7.4	7.4	0.1	243	9.6	8.6	4.3	124	1.8	-1.5	1.0			
8	63	1.8	-1.6	-0.8	45	2.3	-1.6	-1.6	17	3.4	-1.0	-3.3	358	3.0	0.1	-3.0	267	6.8	6.8	0.4	253	5.3	5.1	1.6	89	5.5	-5.5	-0.1			
9	17	1.0	-0.3	-1.0	29	2.5	-1.2	-2.2	2	3.1	-0.1	-3.1	358	3.8	0.1	-3.8	275	6.3	6.3	-0.5	241	5.7	5.0	2.8	107	6.7	-6.4	2.0			
10	321	1.3	0.8	-1.0	9	2.5	-0.4	-2.5	351	4.0	0.6	-4.0	337	3.8	1.5	-3.5	267	7.2	7.2	0.4	231	7.9	6.1	5.0	100	6.2	-6.1	1.1			
11	248	1.1	1.0	0.4	360	1.6	0.0	-1.6	351	3.1	0.5	-3.1	344	3.6	1.0	-3.5	260	7.2	7.1	1.3	234	6.9	5.6	4.1	117	7.7	-6.9	3.5			
12	16	1.9	-0.5	-1.8	15	2.0	-0.5	-1.9	9	4.3	-0.7	-4.2	353	3.9	0.5	-3.9	232	4.1	3.2	2.5	220	7.0	4.5	5.4	119	4.7	-4.1	2.3			
13	356	1.5	0.1	-1.5	9	2.6	-0.4	-2.6	2	3.5	-0.1	-3.5	352	2.9	0.4	-2.9	227	5.0	3.6	3.4	231	6.6	5.1	4.2	99	8.7	-8.6	1.3			
14	221	0.9	0.6	0.7	328	1.5	0.8	-1.3	9	3.3	-0.5	-3.3	11	2.6	-0.5	-2.6	228	3.0	2.2	2.0	211	5.2	2.7	4.5	104	8.5	-8.2	2.1			
15	180	2.8	0.0	2.8	321	2.1	1.3	-1.6	6	3.1	-0.3	-3.1	360	3.0	0.0	-3.0	262	2.7	2.7	0.4	204	3.5	1.4	3.2	103	9.1	-8.9	2.1			
16	230	2.5	1.9	1.6	338	1.8	0.7	-1.7	360	3.1	0.0	-3.1	337	4.0	1.6	-3.7	241	4.7	4.1	2.3	224	3.6	2.5	2.6	103	7.3	-7.1	1.6			
17	301	1.2	1.0	-0.6	336	2.2	0.9	-2.0	347	2.8	0.6	-2.7	335	3.5	1.5	-3.2	274	4.3	4.3	-0.3	202	3.5	1.3	3.3	113	9.0	-8.3	3.5			
18	282	6.3	6.2	-1.3	310	3.3	2.5	-2.1	327	4.3	2.3	-3.6	344	4.8	1.3	-4.6	274	3.0	3.0	-0.2	236	4.0	3.3	2.2	95	7.3	-7.3	0.7			
19	257	1.8	1.8	0.4	313	3.4	2.5	-2.3	324	4.3	2.5	-3.5	1	4.5	-0.1	-4.5	284	2.5	2.4	-0.6	203	5.3	2.1	4.9	104	8.5	-8.3	2.0			
20	310	4.5	3.4	-2.9	323	3.1	1.9	-2.5	328	3.8	2.0	-3.2	360	4.2	0.0	-4.2	257	2.7	2.6	0.6	201	5.1	1.8	4.8	99	9.9	-9.8	1.6			
21	304	2.5	2.1	-1.4	324	3.2	1.9	-2.6	350	2.3	0.4	-2.3	350	2.8	0.5	-2.8	238	2.6	2.2	1.4	203	3.8	1.5	3.5	104	7.4	-7.2	1.8			
22	297	2.5	2.2	-1.1	321	2.6	1.6	-2.0	336	3.7	1.5	-3.4	357	3.8	0.2	-3.8	255	3.8	3.7	1.0	173	3.9	-0.5	3.9	97	11.2	-11.1	1.4			
23	255	2.3	2.2	0.6	333	3.6	1.6	-3.2	339	4.0	1.4	-3.7	337	3.0	1.2	-2.8	274	2.8	2.8	-0.2	161	3.9	-1.3	3.7	93	11.2	-11.2	0.6			
24	63	0.4	-0.4	-0.2	338	3.5	1.3	-3.2	351	3.8	0.6	-3.8	4	4.1	-0.3	-4.1	239	2.6	2.2	1.3	174	3.7	-0.4	3.7	96	14.0	-13.9	1.5			
25	293	3.0	2.8	-1.2	337	3.0	1.2	-2.8	354	3.1	0.3	-3.1	9	3.1	-0.5	-3.1	263	1.7	1.7	0.2	169	3.2	-0.6	3.1	97	11.7	-11.6	1.4			
26	175	1.2	-0.1	1.2	335	2.6	1.1	-2.4	349	3.2	0.6	-3.1	35	3.3	-1.9	-2.7	180	1.2	0.0	1.2	135	2.4	-1.7	1.7	95	16.0	-15.9	1.5			
27	226	3.3	2.4	2.3	333	2.9	1.3	-2.6	339	3.0	1.1	-2.8	7	2.4	-0.3	-2.4	113	0.8	-0.7	0.3	132	3.8	-2.8	2.5	108	13.6	-13.0	4.1			
28	257	1.3	1.3	0.3	306	2.4	1.9	-1.4	332	2.7	1.3	-2.4	360	2.2	0.0	-2.2	207	0.9	0.4	0.8	143	4.1	-2.5	3.3	96	14.4	-14.3	1.4			
29	276	3.0	3.0	-0.3	307	3.5	2.8	-2.1	334	3.0	1.3	-2.7	355	2.2	0.2	-2.2	210	1.6	0.8	1.4	136	5.3	-3.7	3.8	100	14.0	-13.8	2.5			
30	282	2.9	2.8	-0.6	294	2.7	2.5	-1.1	320	2.3	1.5	-1.8	328	1.5	0.8	-1.3	148	1.9	-1.0	1.6	133	5.2	-3.8	3.5	103	15.9	-15.5	3.7			
31	277	2.6	2.6	-0.3	305	2.4	2.0	-1.4	325	2.8	1.6	-2.3	337	1.3	0.5	-1.2	163	1.0	-0.3	1.0	137	6.4	-4.4	4.7	104	16.1	-15.6	4.0			

Daily Normals of Upper Air Winds (1971-2000)

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HYDERABAD

JUNE

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	264	2.0	2.0	0.2	295	2.3	2.1	-1.0	315	2.1	1.5	-1.5	320	1.7	1.1	-1.3	132	1.5	-1.1	1.0	126	6.7	-5.4	3.9	99	15.9	-15.7	2.6			
2	257	2.2	2.1	0.5	306	2.9	2.3	-1.7	344	3.5	1.0	-3.4	21	0.9	-0.3	-0.8	69	3.0	-2.8	-1.1	110	5.9	-5.5	2.0	97	17.9	-17.8	2.2			
3	286	2.2	2.1	-0.6	309	2.7	2.1	-1.7	358	2.8	0.1	-2.8	355	1.2	0.1	-1.2	131	2.9	-2.2	1.9	99	7.9	-7.8	1.2	98	18.2	-18.0	2.5			
4	250	2.3	2.2	0.8	300	3.0	2.6	-1.5	335	3.5	1.5	-3.2	338	1.6	0.6	-1.5	92	2.7	-2.7	0.1	105	5.6	-5.4	1.4	91	19.5	-19.5	0.5			
5	219	2.8	1.8	2.2	293	2.5	2.3	-1.0	306	2.6	2.1	-1.5	351	1.9	0.3	-1.9	74	2.6	-2.5	-0.7	100	6.4	-6.3	1.1	94	19.4	-19.4	1.2			
6	257	3.6	3.5	0.8	262	3.4	3.4	0.5	285	2.0	1.9	-0.5	312	1.3	1.0	-0.9	74	2.2	-2.1	-0.6	105	8.4	-8.1	2.1	89	19.3	-19.3	-0.2			
7	215	1.9	1.1	1.6	252	3.9	3.7	1.2	263	3.1	3.1	0.4	260	2.2	2.2	0.4	92	2.7	-2.7	0.1	91	9.8	-9.8	0.1	87	19.7	-19.7	-1.0			
8	261	4.5	4.4	0.7	270	5.4	5.4	0.0	281	4.2	4.1	-0.8	307	2.0	1.6	-1.2	76	3.8	-3.7	-0.9	102	9.9	-9.7	2.0	88	20.0	-20.0	-0.8			
9	237	4.5	3.8	2.5	272	6.3	6.3	-0.2	286	4.8	4.6	-1.3	275	3.2	3.2	-0.3	68	3.5	-3.3	-1.3	82	12.2	-12.1	-1.8	84	21.2	-21.1	-2.2			
10	245	6.3	5.7	2.6	275	6.2	6.2	-0.5	301	3.9	3.3	-2.0	299	2.3	2.0	-1.1	64	5.0	-4.5	-2.2	83	10.1	-10.0	-1.2	87	22.8	-22.8	-1.2			
11	242	2.7	2.4	1.3	281	5.2	5.1	-1.0	304	4.0	3.3	-2.2	325	1.6	0.9	-1.3	71	4.2	-4.0	-1.4	87	9.8	-9.8	-0.5	88	23.4	-23.4	-0.7			
12	228	4.2	3.1	2.8	279	4.0	4.0	-0.6	320	2.6	1.7	-2.0	329	1.7	0.9	-1.5	75	4.6	-4.4	-1.2	84	10.7	-10.6	-1.1	85	23.8	-23.7	-1.9			
13	215	2.8	1.6	2.3	290	5.2	4.9	-1.8	301	4.2	3.6	-2.2	328	2.5	1.3	-2.1	68	4.1	-3.8	-1.5	78	11.8	-11.5	-2.5	85	25.2	-25.1	-2.3			
14	242	2.4	2.1	1.1	276	4.9	4.9	-0.5	298	4.9	4.3	-2.3	333	2.9	1.3	-2.6	60	4.8	-4.1	-2.4	86	12.2	-12.2	-0.9	90	24.4	-24.4	-0.1			
15	239	6.8	5.8	3.5	269	6.0	6.0	0.1	282	4.0	3.9	-0.8	323	2.0	1.2	-1.6	61	4.7	-4.1	-2.3	86	11.9	-11.9	-0.9	85	25.5	-25.4	-2.0			
16	256	6.2	6.0	1.5	260	6.5	6.4	1.1	282	5.2	5.1	-1.1	281	2.0	2.0	-0.4	81	3.8	-3.8	-0.6	88	12.5	-12.5	-0.5	85	24.0	-23.9	-2.0			
17	256	8.4	8.2	2.0	275	8.7	8.7	-0.7	285	6.6	6.4	-1.7	280	4.6	4.5	-0.8	54	5.3	-4.3	-3.1	77	13.8	-13.4	-3.2	89	22.3	-22.3	-0.3			
18	267	7.0	7.0	0.4	273	9.4	9.4	-0.5	282	8.7	8.5	-1.8	280	5.5	5.4	-1.0	61	4.1	-3.6	-2.0	85	15.4	-15.3	-1.4	84	24.3	-24.2	-2.5			
19	238	7.6	6.5	4.0	269	10.0	10.0	0.1	282	8.0	7.8	-1.7	279	5.8	5.7	-0.9	70	5.2	-4.9	-1.8	83	14.0	-13.9	-1.7	85	26.0	-25.9	-2.2			
20	262	9.0	8.9	1.3	274	9.0	9.0	-0.6	285	8.6	8.3	-2.3	284	5.3	5.1	-1.3	73	4.9	-4.7	-1.4	84	14.3	-14.2	-1.6	89	25.8	-25.8	-0.4			
21	274	9.7	9.7	-0.7	275	8.8	8.8	-0.8	282	8.7	8.5	-1.8	294	4.2	3.8	-1.7	70	7.1	-6.7	-2.4	81	16.1	-15.9	-2.5	84	26.8	-26.7	-2.8			
22	261	7.4	7.3	1.1	280	8.6	8.5	-1.5	284	8.4	8.2	-2.0	298	4.7	4.2	-2.2	65	8.1	-7.3	-3.4	86	16.7	-16.6	-1.3	86	28.5	-28.4	-1.8			
23	259	6.9	6.8	1.3	273	8.5	8.5	-0.5	281	9.1	8.9	-1.8	285	4.9	4.7	-1.3	71	4.9	-4.6	-1.6	82	15.4	-15.3	-2.1	88	27.8	-27.8	-1.1			
24	259	7.6	7.5	1.5	273	8.9	8.9	-0.4	284	7.4	7.2	-1.8	292	4.1	3.8	-1.5	73	5.8	-5.5	-1.7	85	16.6	-16.5	-1.5	89	29.5	-29.5	-0.3			
25	261	6.7	6.6	1.1	273	8.6	8.6	-0.4	281	9.1	8.9	-1.7	291	5.6	5.2	-2.0	61	7.9	-6.9	-3.8	83	17.9	-17.8	-2.3	81	27.6	-27.2	-4.4			
26	273	7.2	7.2	-0.4	270	9.0	9.0	0.0	283	8.3	8.1	-1.9	291	5.7	5.3	-2.0	77	5.8	-5.7	-1.3	86	16.8	-16.8	-1.1	90	31.1	-31.1	-0.2			
27	258	7.0	6.8	1.5	276	8.9	8.9	-0.9	280	8.5	8.4	-1.5	280	4.0	3.9	-0.7	73	7.1	-6.8	-2.1	82	18.6	-18.4	-2.5	85	32.4	-32.3	-2.7			
28	277	6.9	6.9	-0.8	267	9.1	9.1	0.5	280	9.0	8.9	-1.6	278	4.2	4.2	-0.6	82	8.6	-8.5	-1.2	81	20.1	-19.9	-3.0	80	31.2	-30.7	-5.4			
29	259	5.7	5.6	1.1	269	8.8	8.8	0.2	281	8.1	8.0	-1.5	273	3.6	3.6	-0.2	79	6.7	-6.6	-1.3	85	17.8	-17.7	-1.7	82	30.8	-30.5	-4.2			
30	273	6.9	6.9	-0.4	272	9.2	9.2	-0.3	280	8.0	7.9	-1.4	259	2.6	2.6	0.5	90	7.9	-7.9	0.0	88	18.4	-18.4	-0.7	85	29.7	-29.6	-2.7			

Daily Normals of Upper Air Winds (1971-2000)

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HYDERABAD

JULY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	253	7.2	6.9	2.1	265	9.4	9.4	0.9	277	8.6	8.5	-1.0	288	3.9	3.7	-1.2	83	8.1	-8.0	-1.0	86	19.5	-19.4	-1.4	84	31.7	-31.5	-3.1			
2	263	7.0	7.0	0.8	272	9.3	9.3	-0.3	282	9.5	9.3	-1.9	295	4.1	3.7	-1.7	79	7.1	-7.0	-1.4	85	16.7	-16.6	-1.4	83	32.4	-32.2	-3.9			
3	272	6.2	6.2	-0.2	272	9.5	9.5	-0.4	280	9.5	9.3	-1.7	292	6.3	5.8	-2.4	75	7.0	-6.8	-1.8	86	19.2	-19.2	-1.2	82	34.2	-33.9	-4.8			
4	278	5.5	5.4	-0.8	275	7.8	7.8	-0.7	283	9.2	9.0	-2.1	297	4.0	3.6	-1.8	78	9.0	-8.8	-1.8	89	18.7	-18.7	-0.4	86	32.2	-32.1	-2.3			
5	290	5.8	5.4	-2.0	280	9.5	9.4	-1.6	280	10.0	9.8	-1.8	288	4.0	3.8	-1.2	68	8.7	-8.0	-3.3	88	19.6	-19.6	-0.8	87	32.9	-32.9	-1.5			
6	251	5.2	4.9	1.7	273	8.2	8.2	-0.4	281	9.6	9.4	-1.9	292	3.1	2.9	-1.2	86	8.7	-8.7	-0.6	87	20.0	-20.0	-0.9	87	30.1	-30.1	-1.4			
7	261	4.0	4.0	0.6	271	8.4	8.4	-0.1	277	9.3	9.2	-1.2	283	4.1	4.0	-0.9	81	8.6	-8.5	-1.4	85	21.0	-20.9	-1.7	85	33.5	-33.4	-2.8			
8	247	5.6	5.2	2.2	267	8.4	8.4	0.4	275	8.0	8.0	-0.7	280	4.5	4.4	-0.8	79	7.8	-7.7	-1.5	82	19.4	-19.2	-2.7	85	31.0	-30.9	-2.5			
9	255	7.2	6.9	1.9	269	8.6	8.6	0.2	280	9.5	9.4	-1.6	292	5.2	4.8	-1.9	78	7.9	-7.7	-1.7	91	19.0	-19.0	0.4	87	32.0	-32.0	-1.6			
10	255	8.5	8.2	2.2	272	9.4	9.4	-0.3	286	9.5	9.1	-2.6	306	3.7	3.0	-2.2	83	10.2	-10.1	-1.3	88	21.1	-21.1	-0.8	85	33.1	-33.0	-2.8			
11	253	7.1	6.8	2.1	276	8.7	8.7	-0.9	284	9.6	9.3	-2.3	289	3.7	3.5	-1.2	79	9.4	-9.2	-1.8	84	17.6	-17.5	-1.8	86	32.0	-31.9	-2.1			
12	241	9.5	8.3	4.6	269	9.1	9.1	0.1	279	9.4	9.3	-1.5	277	3.4	3.4	-0.4	78	7.4	-7.2	-1.5	84	22.1	-22.0	-2.4	85	31.3	-31.2	-2.8			
13	255	8.2	7.9	2.1	269	8.7	8.7	0.2	275	8.8	8.8	-0.7	270	3.8	3.8	0.0	83	8.5	-8.4	-1.1	88	20.8	-20.8	-0.7	81	32.5	-32.1	-5.3			
14	249	7.3	6.8	2.6	269	8.2	8.2	0.1	277	8.8	8.7	-1.1	269	4.8	4.8	0.1	86	8.5	-8.5	-0.6	89	21.6	-21.6	-0.4	85	31.0	-30.9	-2.7			
15	260	8.9	8.8	1.6	270	9.9	9.9	0.0	282	10.7	10.5	-2.3	287	3.1	3.0	-0.9	80	8.8	-8.7	-1.5	88	20.8	-20.8	-0.8	88	32.2	-32.2	-0.9			
16	245	7.5	6.8	3.1	273	8.9	8.9	-0.5	285	9.6	9.3	-2.5	315	2.4	1.7	-1.7	81	9.7	-9.6	-1.6	88	19.8	-19.8	-0.6	85	35.9	-35.8	-2.9			
17	262	8.4	8.3	1.1	272	9.9	9.9	-0.4	280	9.7	9.6	-1.7	281	3.3	3.2	-0.6	74	8.1	-7.8	-2.2	83	19.8	-19.7	-2.3	87	31.4	-31.4	-1.5			
18	251	7.9	7.5	2.6	268	10.3	10.3	0.3	273	10.2	10.2	-0.6	270	3.8	3.8	0.0	79	9.6	-9.4	-1.8	84	18.7	-18.6	-2.1	84	30.7	-30.5	-3.4			
19	252	7.1	6.8	2.2	267	9.2	9.2	0.5	281	9.3	9.1	-1.7	276	4.9	4.9	-0.5	91	8.7	-8.7	0.1	86	20.7	-20.6	-1.6	84	30.1	-29.9	-3.0			
20	249	9.8	9.2	3.5	273	10.1	10.1	-0.5	279	11.0	10.9	-1.7	301	4.8	4.1	-2.5	79	8.9	-8.7	-1.7	78	20.0	-19.6	-4.0	87	33.1	-33.0	-2.0			
21	260	7.2	7.1	1.3	278	10.6	10.5	-1.4	281	10.7	10.5	-2.0	321	2.1	1.3	-1.6	80	7.7	-7.6	-1.4	82	20.9	-20.7	-2.9	83	29.3	-29.1	-3.5			
22	266	7.8	7.8	0.6	274	9.2	9.2	-0.6	277	10.2	10.1	-1.3	279	3.2	3.2	-0.5	77	8.3	-8.1	-1.9	84	20.7	-20.6	-2.2	82	32.0	-31.7	-4.6			
23	260	9.6	9.4	1.7	273	9.5	9.5	-0.5	286	10.3	9.9	-2.9	293	4.1	3.8	-1.6	81	9.2	-9.1	-1.4	88	21.1	-21.1	-0.9	82	33.7	-33.4	-4.4			
24	275	8.8	8.8	-0.8	273	8.4	8.4	-0.4	279	10.6	10.5	-1.6	243	3.4	3.0	1.5	93	8.0	-8.0	0.4	79	19.0	-18.6	-3.7	85	32.0	-31.9	-2.7			
25	267	10.4	10.4	0.5	269	9.7	9.7	0.1	274	9.2	9.2	-0.6	285	3.0	2.9	-0.8	81	8.0	-7.9	-1.2	83	19.5	-19.4	-2.4	85	30.5	-30.4	-2.5			
26	260	6.3	6.2	1.1	271	9.3	9.3	-0.1	276	9.8	9.7	-1.0	276	4.0	4.0	-0.4	74	8.1	-7.8	-2.3	82	25.0	-24.8	-3.5	85	32.3	-32.2	-3.1			
27	266	7.9	7.9	0.5	278	9.9	9.8	-1.3	284	10.1	9.8	-2.4	277	5.8	5.8	-0.7	79	6.5	-6.4	-1.3	84	21.2	-21.1	-2.1	81	33.8	-33.4	-5.2			
28	264	6.8	6.8	0.7	277	9.3	9.2	-1.1	283	8.6	8.4	-1.9	288	4.7	4.5	-1.5	85	7.1	-7.1	-0.6	77	16.0	-15.6	-3.5	86	32.2	-32.1	-2.2			
29	266	7.8	7.8	0.6	280	10.5	10.3	-1.8	286	10.3	9.9	-2.9	290	5.1	4.8	-1.7	73	7.3	-7.0	-2.2	85	19.0	-18.9	-1.6	86	32.3	-32.2	-2.3			
30	252	8.0	7.6	2.4	277	10.9	10.8	-1.3	285	10.6	10.2	-2.8	299	3.8	3.3	-1.8	73	8.6	-8.2	-2.5	87	19.1	-19.1	-1.0	86	32.3	-32.2	-2.4			
31	265	6.6	6.6	0.6	277	9.4	9.3	-1.2	285	9.9	9.6	-2.5	286	3.3	3.2	-0.9	82	8.6	-8.5	-1.2	88	19.6	-19.6	-0.6	85	31.8	-31.7	-2.9			

Daily Normals of Upper Air Winds (1971-2000)

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HYDERABAD

AUGUST

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	263	6.0	6.0	0.7	280	8.8	8.7	-1.6	286	9.6	9.2	-2.7	295	3.3	3.0	-1.4	70	8.1	-7.6	-2.7	81	18.6	-18.4	-2.8	82	34.8	-34.5	-4.6			
2	275	7.2	7.2	-0.6	282	10.4	10.2	-2.1	283	10.5	10.2	-2.3	274	3.2	3.2	-0.2	91	7.9	-7.9	0.1	81	18.8	-18.6	-2.8	78	35.2	-34.4	-7.4			
3	268	6.2	6.2	0.2	277	9.9	9.8	-1.2	281	10.3	10.1	-1.9	277	4.0	4.0	-0.5	84	7.5	-7.5	-0.8	83	19.8	-19.7	-2.4	84	32.1	-31.9	-3.4			
4	264	6.2	6.2	0.7	276	8.9	8.8	-1.0	279	8.7	8.6	-1.4	286	4.7	4.5	-1.3	84	7.0	-7.0	-0.7	84	18.4	-18.3	-1.9	84	30.6	-30.4	-3.1			
5	268	6.8	6.8	0.2	277	9.7	9.6	-1.1	282	10.7	10.4	-2.3	280	3.5	3.4	-0.6	83	7.5	-7.4	-0.9	85	16.8	-16.7	-1.4	86	28.5	-28.4	-2.1			
6	266	6.4	6.4	0.4	280	8.8	8.7	-1.6	280	8.7	8.6	-1.5	296	4.8	4.3	-2.1	78	7.7	-7.5	-1.6	82	18.7	-18.5	-2.5	83	30.3	-30.1	-3.8			
7	271	6.1	6.1	-0.1	278	9.9	9.8	-1.3	285	11.1	10.7	-2.8	287	5.9	5.7	-1.7	68	6.8	-6.3	-2.5	82	18.1	-17.9	-2.4	85	30.0	-29.9	-2.8			
8	263	6.5	6.5	0.8	279	9.9	9.8	-1.6	289	10.3	9.8	-3.3	298	4.4	3.9	-2.1	69	6.7	-6.3	-2.4	89	18.3	-18.3	-0.3	84	30.8	-30.7	-3.0			
9	292	5.5	5.1	-2.1	279	9.3	9.2	-1.5	286	10.7	10.3	-2.9	279	3.9	3.9	-0.6	100	6.8	-6.7	1.2	87	17.9	-17.9	-0.9	83	30.1	-29.9	-3.5			
10	272	6.5	6.5	-0.2	281	9.2	9.0	-1.7	285	8.8	8.5	-2.3	302	3.6	3.0	-1.9	85	8.7	-8.7	-0.7	91	18.0	-18.0	0.3	80	28.3	-27.9	-4.9			
11	260	6.8	6.7	1.2	278	9.3	9.2	-1.3	281	10.4	10.2	-1.9	272	3.1	3.1	-0.1	79	8.1	-8.0	-1.5	87	19.8	-19.8	-1.1	85	30.5	-30.4	-2.5			
12	273	5.7	5.7	-0.3	282	9.7	9.5	-2.0	286	9.6	9.2	-2.6	274	2.7	2.7	-0.2	80	10.0	-9.9	-1.7	79	19.3	-19.0	-3.6	83	31.9	-31.7	-3.9			
13	283	7.6	7.4	-1.7	283	10.3	10.0	-2.4	289	10.0	9.4	-3.3	302	4.7	4.0	-2.5	81	7.3	-7.2	-1.1	84	18.1	-18.0	-1.9	89	29.9	-29.9	-0.6			
14	287	5.7	5.4	-1.7	282	9.9	9.7	-2.0	288	10.5	10.0	-3.2	300	4.6	4.0	-2.3	87	8.3	-8.3	-0.5	85	18.2	-18.1	-1.7	88	31.8	-31.8	-1.2			
15	279	7.1	7.0	-1.1	284	9.4	9.1	-2.2	288	9.6	9.1	-2.9	297	3.3	2.9	-1.5	83	8.7	-8.6	-1.0	85	21.2	-21.1	-1.8	85	32.2	-32.1	-2.6			
16	277	5.4	5.4	-0.7	282	9.4	9.2	-2.0	285	9.5	9.2	-2.4	293	3.6	3.3	-1.4	94	9.1	-9.1	0.6	79	18.4	-18.0	-3.6	84	28.8	-28.7	-2.8			
17	287	5.8	5.5	-1.7	283	8.2	8.0	-1.8	284	10.1	9.8	-2.5	291	3.4	3.2	-1.2	90	6.2	-6.2	0.0	87	18.3	-18.3	-0.8	86	30.1	-30.0	-1.9			
18	272	6.0	6.0	-0.2	284	8.3	8.1	-2.0	291	9.5	8.9	-3.4	302	3.4	2.9	-1.8	80	7.3	-7.2	-1.3	87	19.7	-19.7	-1.2	85	32.1	-32.0	-2.7			
19	273	5.4	5.4	-0.3	281	9.3	9.1	-1.7	288	9.2	8.8	-2.8	285	4.3	4.2	-1.1	79	7.2	-7.1	-1.4	83	17.8	-17.7	-2.1	85	31.0	-30.9	-2.5			
20	289	5.2	4.9	-1.7	282	8.9	8.7	-1.8	291	8.7	8.1	-3.1	288	2.5	2.4	-0.8	79	9.5	-9.3	-1.8	83	20.9	-20.7	-2.7	87	29.3	-29.3	-1.7			
21	289	4.9	4.6	-1.6	286	9.5	9.1	-2.6	291	8.5	7.9	-3.1	308	3.1	2.4	-1.9	84	9.3	-9.2	-1.0	84	18.3	-18.2	-1.9	87	31.1	-31.1	-1.6			
22	295	4.7	4.3	-2.0	283	8.4	8.2	-1.9	287	7.7	7.4	-2.3	292	1.6	1.5	-0.6	92	8.4	-8.4	0.3	87	18.2	-18.2	-1.1	84	29.4	-29.2	-3.0			
23	263	4.2	4.2	0.5	279	8.0	7.9	-1.2	286	8.2	7.9	-2.2	252	2.6	2.5	0.8	92	7.8	-7.8	0.3	84	20.1	-20.0	-2.0	86	29.2	-29.1	-2.0			
24	272	3.1	3.1	-0.1	280	7.2	7.1	-1.2	278	7.4	7.3	-1.0	277	2.4	2.4	-0.3	86	7.7	-7.7	-0.5	87	20.0	-20.0	-1.1	84	28.5	-28.3	-3.0			
25	278	5.9	5.8	-0.8	282	7.9	7.7	-1.6	283	8.4	8.2	-1.9	286	3.7	3.6	-1.0	83	7.4	-7.3	-0.9	89	19.5	-19.5	-0.3	87	29.3	-29.3	-1.3			
26	268	6.5	6.5	0.2	288	8.0	7.6	-2.5	284	9.3	9.0	-2.2	302	3.8	3.2	-2.0	75	8.0	-7.7	-2.1	88	18.1	-18.1	-0.5	91	29.2	-29.2	0.7			
27	276	6.3	6.3	-0.7	287	9.5	9.1	-2.7	290	8.2	7.7	-2.8	308	2.9	2.3	-1.8	76	7.1	-6.9	-1.7	90	17.2	-17.2	-0.1	88	27.5	-27.5	-1.1			
28	276	7.2	7.2	-0.8	289	9.1	8.6	-3.0	291	8.5	7.9	-3.0	294	3.5	3.2	-1.4	90	7.3	-7.3	0.0	85	18.5	-18.4	-1.6	85	28.3	-28.2	-2.6			
29	267	6.4	6.4	0.3	281	8.8	8.6	-1.7	283	8.8	8.6	-2.0	277	3.2	3.2	-0.4	86	6.2	-6.2	-0.4	84	15.3	-15.2	-1.6	81	27.0	-26.7	-4.0			
30	276	8.1	8.1	-0.9	277	8.6	8.5	-1.0	277	10.1	10.0	-1.2	274	3.0	3.0	-0.2	92	6.7	-6.7	0.2	91	18.1	-18.1	0.2	86	27.8	-27.7	-1.7			
31	271	5.2	5.2	-0.1	281	7.6	7.5	-1.5	281	7.8	7.7	-1.5	289	2.1	2.0	-0.7	77	6.1	-5.9	-1.4	89	17.9	-17.9	-0.2	88	24.7	-24.7	-0.9			

Daily Normals of Upper Air Winds (1971-2000)

HYDERABAD

SEPTEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	261	7.3	7.2	1.2	275	7.5	7.5	-0.6	282	7.7	7.5	-1.6	287	1.7	1.6	-0.5	85	6.9	-6.9	-0.6	90	17.6	-17.6	0.0	86	26.9	-26.8	-1.8			
2	261	6.9	6.8	1.1	278	7.8	7.7	-1.1	271	7.1	7.1	-0.1	259	2.5	2.5	0.5	86	7.8	-7.8	-0.6	83	17.1	-17.0	-2.2	83	26.2	-26.0	-3.0			
3	260	6.7	6.6	1.2	281	7.0	6.9	-1.4	281	7.4	7.3	-1.4	271	3.9	3.9	-0.1	89	6.7	-6.7	-0.1	89	17.9	-17.9	-0.4	86	23.5	-23.5	-1.5			
4	284	5.9	5.7	-1.4	282	6.7	6.6	-1.4	285	6.7	6.5	-1.8	283	2.8	2.7	-0.6	77	6.6	-6.4	-1.5	87	18.1	-18.1	-0.8	90	25.2	-25.2	-0.1			
5	269	5.7	5.7	0.1	278	7.0	6.9	-1.0	279	8.1	8.0	-1.2	282	3.5	3.4	-0.7	84	6.2	-6.2	-0.7	85	16.1	-16.0	-1.4	88	24.4	-24.4	-1.0			
6	254	4.1	3.9	1.1	278	6.7	6.6	-0.9	282	8.0	7.8	-1.7	284	3.0	2.9	-0.7	81	5.8	-5.7	-0.9	86	15.2	-15.2	-1.0	86	24.8	-24.7	-1.8			
7	266	6.4	6.4	0.4	290	6.5	6.1	-2.2	291	6.7	6.3	-2.4	288	2.9	2.8	-0.9	76	6.3	-6.1	-1.5	89	14.6	-14.6	-0.2	85	23.1	-23.0	-2.2			
8	258	4.8	4.7	1.0	293	6.7	6.2	-2.6	290	6.8	6.4	-2.3	288	2.2	2.1	-0.7	87	6.7	-6.7	-0.4	94	15.5	-15.5	1.1	89	23.2	-23.2	-0.5			
9	282	3.3	3.2	-0.7	294	5.5	5.0	-2.2	298	5.2	4.6	-2.4	321	0.6	0.4	-0.5	81	6.7	-6.6	-1.1	91	15.9	-15.9	0.3	90	22.6	-22.6	-0.1			
10	276	3.0	3.0	-0.3	304	6.3	5.2	-3.5	297	6.3	5.6	-2.8	312	1.5	1.1	-1.0	82	5.3	-5.3	-0.7	91	14.7	-14.7	0.3	93	22.7	-22.7	1.3			
11	289	3.7	3.5	-1.2	299	4.7	4.1	-2.3	302	3.6	3.0	-1.9	22	0.5	-0.2	-0.5	72	6.0	-5.7	-1.9	86	14.6	-14.6	-1.0	93	22.4	-22.4	1.3			
12	272	2.3	2.3	-0.1	285	4.8	4.6	-1.2	285	4.1	4.0	-1.1	191	0.5	0.1	0.5	92	6.6	-6.6	0.2	95	15.7	-15.6	1.3	82	22.2	-22.0	-3.2			
13	297	3.8	3.4	-1.7	293	3.8	3.5	-1.5	290	3.8	3.6	-1.3	302	1.5	1.3	-0.8	80	6.5	-6.4	-1.1	85	14.8	-14.7	-1.3	88	21.1	-21.1	-0.7			
14	258	4.8	4.7	1.0	295	4.0	3.6	-1.7	288	4.0	3.8	-1.2	225	0.4	0.3	0.3	83	6.5	-6.5	-0.8	89	15.8	-15.8	-0.3	86	20.3	-20.3	-1.4			
15	293	4.1	3.8	-1.6	307	3.6	2.9	-2.2	297	3.5	3.1	-1.6	333	0.4	0.2	-0.4	87	5.6	-5.6	-0.3	98	13.7	-13.6	1.9	94	19.6	-19.5	1.5			
16	319	3.3	2.2	-2.5	326	3.2	1.8	-2.7	317	2.6	1.8	-1.9	124	1.4	-1.2	0.8	90	4.9	-4.9	0.0	96	13.0	-12.9	1.4	89	18.5	-18.5	-0.4			
17	297	3.0	2.7	-1.4	317	3.3	2.2	-2.4	300	2.0	1.7	-1.0	45	0.6	-0.4	-0.4	82	4.9	-4.9	-0.7	95	11.3	-11.3	1.0	88	19.9	-19.9	-0.6			
18	301	4.2	3.6	-2.2	331	2.6	1.3	-2.3	318	3.0	2.0	-2.2	79	1.0	-1.0	-0.2	90	6.2	-6.2	0.0	98	12.6	-12.5	1.8	91	20.0	-20.0	0.4			
19	299	3.7	3.2	-1.8	334	2.5	1.1	-2.3	332	2.4	1.1	-2.1	128	1.1	-0.9	0.7	96	6.2	-6.2	0.6	103	10.5	-10.2	2.3	93	18.5	-18.5	0.9			
20	344	2.9	0.8	-2.8	332	2.1	1.0	-1.9	328	2.2	1.2	-1.9	108	0.6	-0.6	0.2	99	4.3	-4.2	0.7	102	11.8	-11.6	2.4	94	19.5	-19.5	1.2			
21	332	2.6	1.2	-2.3	333	2.5	1.1	-2.2	338	1.8	0.7	-1.7	107	1.4	-1.3	0.4	87	5.6	-5.6	-0.3	98	12.6	-12.5	1.7	92	18.0	-18.0	0.6			
22	348	1.9	0.4	-1.9	332	2.4	1.1	-2.1	321	1.3	0.8	-1.0	107	1.4	-1.3	0.4	93	6.8	-6.8	0.4	97	12.0	-11.9	1.4	93	19.3	-19.3	0.9			
23	317	1.6	1.1	-1.2	310	1.6	1.2	-1.0	330	1.4	0.7	-1.2	94	1.5	-1.5	0.1	96	6.0	-6.0	0.6	102	11.4	-11.1	2.4	93	18.2	-18.2	0.8			
24	4	1.3	-0.1	-1.3	347	1.8	0.4	-1.8	12	1.4	-0.3	-1.4	143	1.0	-0.6	0.8	96	6.6	-6.6	0.7	97	13.6	-13.5	1.6	89	17.4	-17.4	-0.2			
25	7	2.5	-0.3	-2.5	38	1.1	-0.7	-0.9	98	0.7	-0.7	0.1	105	1.6	-1.5	0.4	83	6.2	-6.1	-0.8	94	10.8	-10.8	0.8	88	17.8	-17.8	-0.5			
26	338	0.5	0.2	-0.5	329	0.6	0.3	-0.5	18	0.6	-0.2	-0.6	153	0.9	-0.4	0.8	86	4.2	-4.2	-0.3	93	10.4	-10.4	0.5	95	15.5	-15.4	1.4			
27	113	2.5	-2.3	1.0	321	1.3	0.8	-1.0	295	1.4	1.3	-0.6	191	0.5	0.1	0.5	104	4.1	-4.0	1.0	107	9.8	-9.4	2.8	89	14.0	-14.0	-0.2			
28	96	1.8	-1.8	0.2	352	1.5	0.2	-1.5	332	1.5	0.7	-1.3	139	0.9	-0.6	0.7	104	6.1	-5.9	1.5	93	9.1	-9.1	0.5	97	13.1	-13.0	1.5			
29	45	2.4	-1.7	-1.7	6	1.8	-0.2	-1.8	14	2.1	-0.5	-2.0	138	1.5	-1.0	1.1	84	3.8	-3.8	-0.4	109	9.1	-8.6	2.9	91	15.4	-15.4	0.3			
30	59	1.7	-1.5	-0.9	24	2.4	-1.0	-2.2	43	2.5	-1.7	-1.8	101	1.0	-1.0	0.2	91	5.0	-5.0	0.1	113	8.8	-8.1	3.4	90	14.2	-14.2	0.0			

Daily Normals of Upper Air Winds (1971-2000)

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HYDERABAD

OCTOBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	77	3.5	-3.4	-0.8	13	2.7	-0.6	-2.6	14	3.3	-0.8	-3.2	65	1.7	-1.5	-0.7	108	4.1	-3.9	1.3	118	10.1	-8.9	4.8	89	11.0	-11.0	-0.1			
2	73	4.2	-4.0	-1.2	16	4.1	-1.1	-3.9	17	3.4	-1.0	-3.3	107	1.7	-1.6	0.5	120	3.9	-3.4	2.0	114	9.3	-8.5	3.8	104	12.8	-12.4	3.0			
3	94	2.8	-2.8	0.2	360	3.1	0.0	-3.1	358	2.7	0.1	-2.7	32	0.9	-0.5	-0.8	103	3.2	-3.1	0.7	100	8.6	-8.5	1.5	94	12.2	-12.2	0.8			
4	25	1.9	-0.8	-1.7	2	3.0	-0.1	-3.0	2	2.4	-0.1	-2.4	333	0.4	0.2	-0.4	94	4.1	-4.1	0.3	102	8.7	-8.5	1.8	97	14.9	-14.8	1.7			
5	24	2.0	-0.8	-1.8	8	2.9	-0.4	-2.9	9	1.8	-0.3	-1.8	150	1.6	-0.8	1.4	108	4.3	-4.1	1.3	112	7.5	-7.0	2.8	102	12.1	-11.8	2.5			
6	35	2.4	-1.4	-2.0	355	2.1	0.2	-2.1	345	1.6	0.4	-1.5	198	0.3	0.1	0.3	122	2.2	-1.9	1.2	122	8.0	-6.8	4.2	97	11.8	-11.7	1.4			
7	48	3.1	-2.3	-2.1	27	2.8	-1.3	-2.5	17	1.7	-0.5	-1.6	225	0.4	0.3	0.3	152	3.4	-1.6	3.0	128	8.0	-6.3	4.9	98	10.3	-10.2	1.5			
8	59	4.3	-3.7	-2.2	26	3.2	-1.4	-2.9	20	2.7	-0.9	-2.5	48	1.2	-0.9	-0.8	112	2.4	-2.2	0.9	127	5.4	-4.3	3.2	99	9.4	-9.3	1.4			
9	56	3.2	-2.7	-1.8	30	3.0	-1.5	-2.6	35	2.1	-1.2	-1.7	135	1.6	-1.1	1.1	127	2.1	-1.7	1.3	121	6.0	-5.1	3.1	93	9.4	-9.4	0.5			
10	100	3.6	-3.5	0.6	39	2.6	-1.6	-2.0	45	1.8	-1.3	-1.3	63	1.1	-1.0	-0.5	113	2.6	-2.4	1.0	119	7.1	-6.2	3.5	101	9.1	-8.9	1.8			
11	103	4.1	-4.0	0.9	48	3.1	-2.3	-2.1	43	1.9	-1.3	-1.4	56	1.1	-0.9	-0.6	114	2.4	-2.2	1.0	132	5.4	-4.0	3.6	100	7.1	-7.0	1.2			
12	106	1.9	-1.8	0.5	37	2.6	-1.6	-2.1	18	2.3	-0.7	-2.2	70	1.5	-1.4	-0.5	114	3.2	-2.9	1.3	120	6.7	-5.8	3.4	95	9.8	-9.8	0.9			
13	80	2.3	-2.3	-0.4	34	3.7	-2.1	-3.1	30	3.6	-1.8	-3.1	87	2.0	-2.0	-0.1	131	1.8	-1.4	1.2	153	5.3	-2.4	4.7	113	7.9	-7.3	3.1			
14	49	2.8	-2.1	-1.8	30	3.8	-1.9	-3.3	36	3.4	-2.0	-2.8	32	1.3	-0.7	-1.1	130	0.8	-0.6	0.5	148	5.4	-2.9	4.6	95	7.4	-7.4	0.6			
15	42	2.5	-1.7	-1.9	39	4.4	-2.8	-3.4	33	3.3	-1.8	-2.8	32	2.2	-1.2	-1.9	90	1.4	-1.4	0.0	133	7.6	-5.6	5.2	108	9.6	-9.1	3.0			
16	74	1.9	-1.8	-0.5	41	4.4	-2.9	-3.3	38	2.8	-1.7	-2.2	37	2.1	-1.3	-1.7	153	2.2	-1.0	2.0	150	5.4	-2.7	4.7	107	8.7	-8.3	2.6			
17	82	1.5	-1.5	-0.2	40	3.1	-2.0	-2.4	39	2.1	-1.3	-1.6	74	0.7	-0.7	-0.2	133	2.3	-1.7	1.6	144	5.9	-3.5	4.8	106	9.6	-9.2	2.7			
18	76	1.6	-1.6	-0.4	42	2.8	-1.9	-2.1	37	2.6	-1.6	-2.1	18	0.6	-0.2	-0.6	168	1.4	-0.3	1.4	153	5.1	-2.3	4.5	118	6.9	-6.1	3.2			
19	86	1.5	-1.5	-0.1	57	3.5	-2.9	-1.9	56	2.5	-2.1	-1.4	166	0.4	-0.1	0.4	200	2.9	1.0	2.7	179	4.0	-0.1	4.0	101	6.5	-6.4	1.3			
20	44	2.8	-1.9	-2.0	54	2.7	-2.2	-1.6	27	2.0	-0.9	-1.8	225	0.1	0.1	0.1	204	1.2	0.5	1.1	159	2.8	-1.0	2.6	119	7.4	-6.5	3.6			
21	56	2.5	-2.1	-1.4	53	3.0	-2.4	-1.8	27	2.5	-1.1	-2.2	230	0.8	0.6	0.5	241	1.0	0.9	0.5	197	3.4	1.0	3.2	108	4.9	-4.7	1.5			
22	90	1.4	-1.4	0.0	60	3.2	-2.8	-1.6	25	1.7	-0.7	-1.5	311	1.1	0.8	-0.7	250	2.3	2.2	0.8	200	4.6	1.6	4.3	115	6.1	-5.5	2.6			
23	69	2.8	-2.6	-1.0	56	2.2	-1.8	-1.2	117	0.4	-0.4	0.2	252	0.6	0.6	0.2	225	1.6	1.1	1.1	166	4.2	-1.0	4.1	122	5.8	-4.9	3.1			
24	94	2.9	-2.9	0.2	69	2.8	-2.6	-1.0	96	1.0	-1.0	0.1	185	1.1	0.1	1.1	237	2.0	1.7	1.1	197	3.9	1.1	3.7	130	3.8	-2.9	2.4			
25	106	2.6	-2.5	0.7	68	3.5	-3.2	-1.3	68	1.6	-1.5	-0.6	253	1.7	1.6	0.5	243	3.0	2.7	1.4	213	5.7	3.1	4.8	125	3.2	-2.6	1.8			
26	55	2.4	-2.0	-1.4	69	3.6	-3.4	-1.3	66	2.4	-2.2	-1.0	243	0.4	0.4	0.2	251	3.6	3.4	1.2	201	7.5	2.7	7.0	130	4.5	-3.4	2.9			
27	45	3.5	-2.5	-2.5	59	3.9	-3.3	-2.0	52	2.4	-1.9	-1.5	49	0.9	-0.7	-0.6	223	4.5	3.1	3.3	197	9.1	2.7	8.7	132	4.7	-3.5	3.2			
28	46	3.2	-2.3	-2.2	65	3.8	-3.5	-1.6	62	2.7	-2.4	-1.3	318	1.3	0.9	-1.0	236	4.6	3.8	2.6	210	7.8	3.9	6.7	117	4.0	-3.6	1.8			
29	18	3.5	-1.1	-3.3	51	4.0	-3.1	-2.5	58	3.2	-2.7	-1.7	352	1.4	0.2	-1.4	246	4.9	4.5	2.0	207	7.3	3.3	6.5	140	3.9	-2.5	3.0			
30	30	3.0	-1.5	-2.6	45	4.1	-2.9	-2.9	51	3.5	-2.7	-2.2	37	1.0	-0.6	-0.8	246	5.7	5.2	2.3	217	9.5	5.7	7.6	137	4.4	-3.0	3.2			
31	60	3.8	-3.3	-1.9	61	4.3	-3.8	-2.1	64	3.4	-3.1	-1.5	72	0.3	-0.3	-0.1	236	5.7	4.7	3.2	202	8.7	3.3	8.1	113	5.3	-4.9	2.1			

Daily Normals of Upper Air Winds (1971-2000)

HYDERABAD

NOVEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	59	3.9	-3.3	-2.0	58	4.4	-3.7	-2.3	77	2.7	-2.6	-0.6	9	1.8	-0.3	-1.8	251	6.4	6.0	2.1	219	8.1	5.1	6.3	118	2.6	-2.3	1.2			
2	53	3.8	-3.0	-2.3	49	4.4	-3.3	-2.9	83	3.3	-3.3	-0.4	44	2.8	-1.9	-2.0	240	3.6	3.1	1.8	209	8.1	4.0	7.1	117	2.8	-2.5	1.3			
3	67	3.3	-3.0	-1.3	67	3.9	-3.6	-1.5	92	2.4	-2.4	0.1	21	1.9	-0.7	-1.8	242	5.3	4.7	2.5	207	10.1	4.5	9.0	123	4.4	-3.7	2.4			
4	62	3.4	-3.0	-1.6	60	4.0	-3.5	-2.0	59	2.6	-2.2	-1.3	38	2.8	-1.7	-2.2	251	4.3	4.1	1.4	211	9.0	4.7	7.7	144	2.9	-1.7	2.3			
5	63	4.5	-4.0	-2.0	59	4.7	-4.0	-2.4	49	2.8	-2.1	-1.8	32	1.5	-0.8	-1.3	250	5.1	4.8	1.7	226	8.5	6.1	5.9	168	3.9	-0.8	3.8			
6	89	4.0	-4.0	-0.1	65	4.7	-4.2	-2.0	79	2.5	-2.5	-0.5	351	1.2	0.2	-1.2	261	5.5	5.4	0.9	221	10.0	6.5	7.6	169	3.1	-0.6	3.0			
7	89	4.8	-4.8	-0.1	65	4.1	-3.7	-1.7	62	2.6	-2.3	-1.2	42	1.5	-1.0	-1.1	258	5.1	5.0	1.1	214	8.5	4.8	7.0	223	1.6	1.1	1.2			
8	84	3.9	-3.9	-0.4	65	3.5	-3.2	-1.5	53	2.1	-1.7	-1.3	13	2.2	-0.5	-2.1	262	4.8	4.7	0.7	208	8.8	4.1	7.8	144	2.2	-1.3	1.8			
9	79	3.2	-3.1	-0.6	63	3.1	-2.8	-1.4	42	2.8	-1.9	-2.1	225	0.8	0.6	0.6	260	5.8	5.7	1.0	225	8.8	6.2	6.3	103	2.8	-2.7	0.6			
10	111	5.3	-4.9	1.9	62	4.1	-3.6	-1.9	59	2.3	-2.0	-1.2	352	2.1	0.3	-2.1	274	5.9	5.9	-0.4	230	8.9	6.8	5.7	197	2.4	0.7	2.3			
11	86	4.3	-4.3	-0.3	58	3.6	-3.1	-1.9	50	2.5	-1.9	-1.6	351	3.2	0.5	-3.2	262	6.1	6.0	0.8	223	10.0	6.8	7.4	126	1.4	-1.1	0.8			
12	84	3.6	-3.6	-0.4	69	4.0	-3.7	-1.4	58	2.6	-2.2	-1.4	35	2.8	-1.6	-2.3	273	5.5	5.5	-0.3	211	9.2	4.8	7.9	172	1.5	-0.2	1.5			
13	79	4.1	-4.0	-0.8	70	4.5	-4.2	-1.5	59	3.1	-2.7	-1.6	34	2.5	-1.4	-2.1	248	5.7	5.3	2.1	232	9.0	7.1	5.5	201	1.7	0.6	1.6			
14	88	3.3	-3.3	-0.1	70	3.7	-3.5	-1.3	58	3.2	-2.7	-1.7	52	1.1	-0.9	-0.7	246	6.1	5.6	2.5	227	9.3	6.8	6.4	184	2.9	0.2	2.9			
15	55	7.8	-6.4	-4.4	70	4.4	-4.1	-1.5	60	4.6	-4.0	-2.3	21	1.9	-0.7	-1.8	249	6.0	5.6	2.1	226	10.1	7.3	7.0	135	2.3	-1.6	1.6			
16	84	3.6	-3.6	-0.4	71	3.9	-3.7	-1.3	55	4.2	-3.4	-2.4	284	0.8	0.8	-0.2	249	8.4	7.8	3.0	214	11.7	6.6	9.7	169	2.5	-0.5	2.5			
17	72	4.1	-3.9	-1.3	72	3.6	-3.4	-1.1	59	1.7	-1.5	-0.9	262	1.5	1.5	0.2	244	7.9	7.1	3.5	224	12.1	8.4	8.7	168	3.3	-0.7	3.2			
18	83	4.7	-4.7	-0.6	64	3.2	-2.9	-1.4	29	2.1	-1.0	-1.8	304	2.7	2.2	-1.5	259	10.0	9.8	1.9	233	13.1	10.5	7.9	168	1.9	-0.4	1.9			
19	85	3.3	-3.3	-0.3	57	3.0	-2.5	-1.6	40	2.3	-1.5	-1.8	325	3.2	1.8	-2.6	248	10.5	9.7	3.9	229	14.3	10.8	9.4	213	4.6	2.5	3.9			
20	86	4.2	-4.2	-0.3	64	2.5	-2.3	-1.1	20	2.0	-0.7	-1.9	301	2.7	2.3	-1.4	250	11.8	11.1	4.1	230	16.6	12.8	10.6	244	4.3	3.9	1.9			
21	102	3.8	-3.7	0.8	61	3.5	-3.1	-1.7	41	1.8	-1.2	-1.4	274	2.9	2.9	-0.2	247	10.6	9.7	4.2	230	14.6	11.2	9.4	203	4.9	1.9	4.5			
22	97	4.1	-4.1	0.5	77	3.1	-3.0	-0.7	74	1.9	-1.8	-0.5	252	2.6	2.5	0.8	249	12.8	11.9	4.6	222	17.4	11.7	12.9	228	5.0	3.7	3.3			
23	72	4.1	-3.9	-1.3	72	3.3	-3.1	-1.0	61	1.0	-0.9	-0.5	268	3.4	3.4	0.1	256	11.9	11.5	2.9	225	15.6	11.0	11.1	208	3.0	1.4	2.6			
24	44	3.0	-2.1	-2.2	46	3.3	-2.4	-2.3	29	1.0	-0.5	-0.9	321	2.7	1.7	-2.1	259	7.6	7.5	1.5	232	14.0	11.0	8.7	239	6.1	5.2	3.1			
25	61	3.1	-2.7	-1.5	52	3.9	-3.1	-2.4	64	2.5	-2.3	-1.1	336	2.7	1.1	-2.5	262	8.5	8.4	1.2	231	12.7	9.8	8.0	234	3.2	2.6	1.9			
26	88	3.6	-3.6	-0.1	65	4.0	-3.6	-1.7	62	2.4	-2.1	-1.1	330	2.0	1.0	-1.7	255	8.1	7.8	2.1	238	12.9	10.9	6.9	263	1.6	1.6	0.2			
27	78	4.0	-3.9	-0.8	67	3.9	-3.6	-1.5	42	2.4	-1.6	-1.8	290	2.3	2.2	-0.8	260	8.4	8.3	1.4	230	14.5	11.1	9.4	241	3.9	3.4	1.9			
28	93	4.1	-4.1	0.2	68	2.9	-2.7	-1.1	9	1.2	-0.2	-1.2	295	3.8	3.4	-1.6	257	11.1	10.8	2.4	229	15.9	12.0	10.5	224	3.6	2.5	2.6			
29	71	3.4	-3.2	-1.1	54	2.4	-1.9	-1.4	40	1.6	-1.0	-1.2	284	2.9	2.8	-0.7	258	11.7	11.5	2.4	234	15.7	12.7	9.2	249	6.2	5.8	2.2			
30	89	4.0	-4.0	-0.1	67	2.8	-2.6	-1.1	55	1.2	-1.0	-0.7	298	3.8	3.4	-1.8	261	10.7	10.6	1.7	238	16.3	13.8	8.6	228	4.8	3.6	3.2			

Daily Normals of Upper Air Winds (1971-2000)

156

HYDERABAD

DECEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	83	3.9	-3.9	-0.5	77	3.7	-3.6	-0.8	42	1.5	-1.0	-1.1	281	2.6	2.6	-0.5	265	10.5	10.5	0.9	237	17.3	14.4	9.5	246	3.7	3.4	1.5			
2	76	3.7	-3.6	-0.9	80	2.8	-2.8	-0.5	90	0.8	-0.8	0.0	276	3.6	3.6	-0.4	242	12.6	11.1	5.9	230	17.5	13.4	11.3	241	6.2	5.4	3.0			
3	103	4.0	-3.9	0.9	86	3.0	-3.0	-0.2	81	1.2	-1.2	-0.2	304	3.7	3.1	-2.1	261	11.1	11.0	1.7	234	16.3	13.2	9.5	241	6.4	5.6	3.1			
4	84	4.0	-4.0	-0.4	70	3.5	-3.3	-1.2	45	1.7	-1.2	-1.2	8	2.1	-0.3	-2.1	258	10.1	9.9	2.1	240	16.0	13.8	8.1	245	3.5	3.2	1.5			
5	79	3.8	-3.7	-0.7	67	3.4	-3.1	-1.3	30	2.0	-1.0	-1.7	299	3.5	3.1	-1.7	249	13.3	12.4	4.8	232	16.1	12.6	10.0	230	2.3	1.8	1.5			
6	84	4.0	-4.0	-0.4	71	3.6	-3.4	-1.2	34	2.5	-1.4	-2.1	286	3.5	3.4	-1.0	249	12.6	11.8	4.5	237	16.6	13.9	9.0	252	5.8	5.5	1.8			
7	76	3.8	-3.7	-0.9	58	3.2	-2.7	-1.7	33	1.7	-0.9	-1.4	301	3.1	2.7	-1.6	258	12.3	12.0	2.6	234	16.7	13.4	9.9	250	6.6	6.2	2.3			
8	90	3.6	-3.6	0.0	63	3.1	-2.8	-1.4	21	1.9	-0.7	-1.8	272	2.5	2.5	-0.1	253	12.7	12.2	3.7	235	17.1	14.1	9.7	254	8.0	7.7	2.2			
9	63	2.7	-2.4	-1.2	47	2.5	-1.8	-1.7	352	1.5	0.2	-1.5	259	4.3	4.2	0.8	255	13.7	13.2	3.6	231	16.3	12.7	10.2	250	4.6	4.3	1.6			
10	87	3.5	-3.5	-0.2	70	3.0	-2.8	-1.0	90	0.5	-0.5	0.0	264	4.1	4.1	0.4	253	15.7	15.0	4.6	238	19.5	16.5	10.4	247	8.2	7.5	3.2			
11	102	2.4	-2.3	0.5	84	2.8	-2.8	-0.3	63	0.4	-0.4	-0.2	282	4.0	3.9	-0.8	249	14.0	13.1	5.0	236	17.9	14.9	10.0	242	6.8	6.0	3.2			
12	105	3.8	-3.7	1.0	80	2.7	-2.7	-0.5	63	0.7	-0.6	-0.3	270	3.8	3.8	0.0	245	12.8	11.6	5.3	243	18.6	16.5	8.5	252	7.9	7.5	2.4			
13	110	3.5	-3.3	1.2	67	2.6	-2.4	-1.0	45	0.4	-0.3	-0.3	270	4.7	4.7	0.0	259	14.7	14.4	2.9	240	18.4	16.0	9.1	252	6.2	5.9	1.9			
14	85	2.5	-2.5	-0.2	72	2.3	-2.2	-0.7	17	1.4	-0.4	-1.3	268	5.6	5.6	0.2	261	14.1	13.9	2.2	242	19.0	16.8	8.8	252	7.1	6.8	2.2			
15	96	4.0	-4.0	0.4	92	2.8	-2.8	0.1	21	0.9	-0.3	-0.8	290	3.7	3.5	-1.3	254	14.5	14.0	3.9	246	20.0	18.3	8.0	262	7.6	7.5	1.1			
16	93	3.9	-3.9	0.2	76	3.2	-3.1	-0.8	45	1.1	-0.8	-0.8	270	4.7	4.7	0.0	265	15.7	15.6	1.5	243	17.2	15.4	7.7	244	8.9	8.0	3.9			
17	79	4.1	-4.0	-0.8	74	2.9	-2.8	-0.8	45	2.0	-1.4	-1.4	260	5.7	5.6	1.0	259	17.4	17.1	3.4	243	21.9	19.5	10.0	261	11.3	11.2	1.7			
18	100	4.0	-3.9	0.7	86	3.2	-3.2	-0.2	333	1.6	0.7	-1.4	271	6.1	6.1	-0.1	269	17.1	17.1	0.4	243	23.0	20.4	10.6	265	9.2	9.2	0.8			
19	88	3.4	-3.4	-0.1	79	3.2	-3.1	-0.6	344	2.9	0.8	-2.8	272	6.1	6.1	-0.2	262	15.9	15.7	2.3	244	22.1	19.9	9.5	249	9.1	8.5	3.2			
20	92	3.7	-3.7	0.1	79	3.1	-3.0	-0.6	355	1.2	0.1	-1.2	292	6.9	6.4	-2.6	265	14.4	14.3	1.3	242	21.2	18.8	9.9	264	8.3	8.3	0.9			
21	97	3.9	-3.9	0.5	76	3.2	-3.1	-0.8	23	1.3	-0.5	-1.2	284	4.5	4.4	-1.1	263	14.9	14.8	1.9	254	20.4	19.6	5.8	247	7.6	7.0	3.0			
22	88	3.4	-3.4	-0.1	76	2.9	-2.8	-0.7	339	1.7	0.6	-1.6	264	6.0	6.0	0.6	260	18.6	18.3	3.1	250	23.0	21.6	8.0	266	13.0	13.0	1.0			
23	93	3.9	-3.9	0.2	80	2.8	-2.8	-0.5	297	1.6	1.4	-0.7	274	6.9	6.9	-0.5	267	18.8	18.8	1.1	252	22.6	21.5	7.1	254	8.5	8.2	2.3			
24	120	4.3	-3.7	2.1	99	2.4	-2.4	0.4	298	1.5	1.3	-0.7	275	8.4	8.4	-0.7	269	19.6	19.6	0.3	248	22.4	20.8	8.3	268	13.2	13.2	0.5			
25	95	3.6	-3.6	0.3	92	2.8	-2.8	0.1	264	1.9	1.9	0.2	279	6.7	6.6	-1.1	259	18.0	17.7	3.5	253	21.9	20.9	6.5	260	11.5	11.3	2.0			
26	95	3.7	-3.7	0.3	101	2.5	-2.5	0.5	295	2.3	2.1	-1.0	272	8.3	8.3	-0.3	261	19.9	19.7	3.0	250	21.5	20.2	7.4	254	13.4	12.9	3.6			
27	116	5.3	-4.8	2.3	99	3.2	-3.2	0.5	312	1.2	0.9	-0.8	259	6.5	6.4	1.3	260	18.3	18.0	3.1	254	22.4	21.6	6.0	257	9.5	9.3	2.1			
28	106	4.8	-4.6	1.3	94	2.6	-2.6	0.2	281	1.6	1.6	-0.3	261	7.3	7.2	1.1	261	17.5	17.3	2.7	255	22.5	21.7	5.8	269	13.5	13.5	0.2			
29	114	4.9	-4.5	2.0	96	2.0	-2.0	0.2	280	2.2	2.2	-0.4	269	8.3	8.3	0.1	267	19.5	19.5	0.9	260	22.2	21.9	3.9	271	11.1	11.1	-0.1			
30	119	3.8	-3.3	1.8	97	1.6	-1.6	0.2	266	3.1	3.1	0.2	274	8.3	8.3	-0.6	268	20.0	20.0	0.7	254	22.1	21.2	6.1	258	10.0	9.8	2.1			
31	120	3.0	-2.6	1.5	109	2.1	-2.0	0.7	270	2.0	2.0	0.0	268	8.2	8.2	0.3	266	19.1	19.1	1.3	251	21.1	20.0	6.7	262	9.8	9.7	1.3			

Daily Normals of Upper Air Winds (1971-2000)

157

JAGDALPUR

JANUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	43	1.8	-1.2	-1.3	360	2.2	0.0	-2.2	308	4.7	3.7	-2.9	292	12.4	11.5	-4.7	282	25.7	25.1	-5.4	279	30.6	30.3	-4.6	276	6.0	6.0	-0.6			
2	357	1.9	0.1	-1.9	326	1.4	0.8	-1.2	304	4.0	3.3	-2.2	283	14.7	14.3	-3.2	282	26.6	26.0	-5.5	278	28.3	28.1	-3.7	272	16.9	16.9	-0.5			
3	6	1.8	-0.2	-1.8	353	2.3	0.3	-2.3	314	4.7	3.4	-3.3	299	12.0	10.5	-5.8	286	28.9	27.8	-7.9	278	27.9	27.6	-3.9	288	23.0	21.9	-7.1			
4	350	1.1	0.2	-1.1	7	1.6	-0.2	-1.6	306	3.2	2.6	-1.9	290	12.8	12.0	-4.4	277	24.1	23.9	-3.1	271	28.0	28.0	-0.4	280	20.1	19.8	-3.5			
5	342	1.3	0.4	-1.2	347	1.3	0.3	-1.3	287	5.2	5.0	-1.5	282	13.7	13.4	-2.8	276	26.0	25.8	-2.9	268	28.1	28.1	0.9	289	12.5	11.8	-4.0			
6	360	1.1	0.0	-1.1	5	1.1	-0.1	-1.1	295	3.8	3.5	-1.6	287	13.8	13.2	-4.0	268	24.7	24.7	0.9	274	23.8	23.7	-1.7	272	14.4	14.4	-0.5			
7	328	1.3	0.7	-1.1	360	1.2	0.0	-1.2	266	3.2	3.2	0.2	284	12.7	12.3	-3.0	277	24.2	24.0	-2.8	262	27.2	26.9	3.8	283	14.8	14.4	-3.3			
8	37	0.5	-0.3	-0.4	291	0.9	0.8	-0.3	273	5.0	5.0	-0.3	274	12.9	12.9	-1.0	283	22.7	22.1	-5.3	280	20.8	20.5	-3.5	300	12.7	11.0	-6.4			
9	225	0.1	0.1	0.1	323	1.0	0.6	-0.8	288	4.0	3.8	-1.2	276	13.6	13.5	-1.4	273	21.6	21.6	-1.1	277	23.2	23.0	-2.9	275	17.0	16.9	-1.5			
10	203	0.8	0.3	0.7	310	0.8	0.6	-0.5	274	3.9	3.9	-0.3	271	13.4	13.4	-0.3	265	25.1	25.0	2.3	264	25.0	24.9	2.5	273	15.0	15.0	-0.9			
11	225	1.4	1.0	1.0	198	0.6	0.2	0.6	261	3.9	3.9	0.6	270	15.8	15.8	-0.1	272	24.6	24.6	-0.8	264	25.8	25.7	2.6	278	17.9	17.7	-2.5			
12	267	1.7	1.7	0.1	311	0.9	0.7	-0.6	265	7.2	7.2	0.6	274	16.7	16.7	-1.2	269	27.5	27.5	0.4	272	26.3	26.3	-0.8	259	13.0	12.8	2.4			
13	277	2.3	2.3	-0.3	297	1.3	1.2	-0.6	289	5.3	5.0	-1.7	291	15.6	14.6	-5.5	283	26.2	25.5	-5.8	272	26.7	26.7	-1.1	263	7.4	7.3	0.9			
14	236	1.4	1.2	0.8	270	1.1	1.1	0.0	277	4.9	4.9	-0.6	275	16.6	16.5	-1.5	272	26.1	26.1	-0.8	271	28.5	28.5	-0.4	23	5.3	-2.1	-4.9			
15	233	3.0	2.4	1.8	285	1.1	1.1	-0.3	261	5.5	5.4	0.9	280	14.3	14.1	-2.5	274	26.0	25.9	-1.7	260	24.8	24.4	4.3	279	9.1	9.0	-1.5			
16	295	1.4	1.3	-0.6	309	1.3	1.0	-0.8	288	5.9	5.6	-1.8	278	14.9	14.8	-2.1	271	24.2	24.2	-0.3	269	22.4	22.4	0.2	205	4.1	1.7	3.7			
17	323	1.0	0.6	-0.8	323	2.0	1.2	-1.6	293	5.6	5.2	-2.2	282	15.1	14.8	-3.2	283	25.4	24.8	-5.7	276	27.7	27.5	-3.0	267	11.7	11.7	0.6			
18	337	2.3	0.9	-2.1	334	2.5	1.1	-2.3	305	2.8	2.3	-1.6	279	13.7	13.5	-2.2	272	26.0	26.0	-0.9	272	26.6	26.6	-0.9	296	10.2	9.2	-4.4			
19	253	1.4	1.3	0.4	298	1.5	1.3	-0.7	302	5.1	4.3	-2.7	288	16.3	15.5	-5.0	282	26.3	25.7	-5.5	261	19.4	19.2	2.9	290	9.0	8.4	-3.1			
20	301	2.3	2.0	-1.2	311	2.0	1.5	-1.3	311	6.0	4.5	-3.9	302	13.8	11.7	-7.4	287	25.2	24.1	-7.4	271	20.8	20.8	-0.2	253	10.8	10.3	3.1			
21	315	2.5	1.8	-1.8	315	1.6	1.1	-1.1	312	5.9	4.4	-4.0	290	15.7	14.7	-5.4	274	23.6	23.6	-1.5	258	25.4	24.9	5.1	256	12.8	12.4	3.1			
22	292	0.5	0.5	-0.2	317	1.8	1.2	-1.3	304	5.4	4.5	-3.0	284	12.8	12.4	-3.0	270	20.2	20.2	-0.1	260	21.1	20.8	3.5	264	14.1	14.0	1.4			
23	346	3.2	0.8	-3.1	338	2.4	0.9	-2.2	312	4.8	3.6	-3.2	291	14.4	13.5	-5.1	271	19.6	19.6	-0.3	270	23.1	23.1	0.2	288	11.9	11.3	-3.6			
24	7	2.3	-0.3	-2.3	356	1.4	0.1	-1.4	329	4.2	2.2	-3.6	292	12.9	11.9	-4.9	278	17.8	17.6	-2.5	256	20.5	19.9	5.1	265	10.0	10.0	0.8			
25	352	2.2	0.3	-2.2	6	1.9	-0.2	-1.9	326	4.0	2.2	-3.3	288	10.8	10.3	-3.4	277	16.8	16.7	-2.1	254	19.4	18.7	5.2	255	11.3	10.9	3.0			
26	358	2.8	0.1	-2.8	354	1.8	0.2	-1.8	338	3.7	1.4	-3.4	287	10.6	10.1	-3.1	276	17.9	17.8	-1.9	257	20.3	19.7	4.7	258	10.3	10.1	2.1			
27	31	2.1	-1.1	-1.8	20	2.3	-0.8	-2.2	348	3.8	0.8	-3.7	296	10.1	9.1	-4.4	281	18.6	18.2	-3.6	255	21.8	21.0	5.7	267	14.0	14.0	0.8			
28	21	2.6	-0.9	-2.4	351	2.0	0.3	-2.0	336	4.2	1.7	-3.8	288	12.2	11.6	-3.8	271	19.7	19.7	-0.4	256	21.5	20.9	5.1	268	12.1	12.1	0.5			
29	250	1.2	1.1	0.4	344	1.5	0.4	-1.4	329	4.8	2.5	-4.1	293	12.1	11.1	-4.8	270	23.7	23.7	0.0	257	27.1	26.4	6.1	264	13.7	13.6	1.5			
30	260	2.2	2.2	0.4	297	1.3	1.2	-0.6	310	5.2	4.0	-3.3	290	14.3	13.5	-4.8	271	23.4	23.4	-0.6	258	29.9	29.2	6.2	279	18.4	18.2	-2.8			
31	235	1.2	1.0	0.7	291	1.7	1.6	-0.6	307	6.5	5.2	-3.9	294	16.0	14.7	-6.4	282	22.2	21.7	-4.7	269	21.3	21.3	0.4	264	15.9	15.8	1.6			

Daily Normals of Upper Air Winds (1971-2000)

158

JAGDALPUR

FEBRUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	277	1.7	1.7	-0.2	277	2.6	2.6	-0.3	305	7.0	5.7	-4.0	288	13.9	13.2	-4.3	281	24.8	24.4	-4.6	271	27.5	27.5	-0.7	277	12.0	11.9	-1.4			
2	238	0.9	0.8	0.5	313	1.6	1.2	-1.1	310	3.4	2.6	-2.2	290	13.0	12.2	-4.4	277	23.2	23.0	-2.8	280	25.5	25.1	-4.5	279	11.4	11.3	-1.8			
3	262	1.5	1.5	0.2	287	1.4	1.3	-0.4	313	4.0	2.9	-2.7	285	12.3	11.9	-3.1	287	23.6	22.6	-6.7	282	29.8	29.1	-6.4	280	11.9	11.7	-2.1			
4	270	1.9	1.9	0.0	317	2.1	1.4	-1.5	314	4.5	3.2	-3.1	286	14.0	13.4	-3.9	279	22.0	21.7	-3.4	272	20.4	20.4	-0.7	301	19.6	16.8	-10.0			
5	321	0.6	0.4	-0.5	305	1.6	1.3	-0.9	311	3.7	2.8	-2.4	294	12.5	11.4	-5.1	280	22.2	21.9	-3.9	281	24.7	24.2	-4.7	290	16.7	15.7	-5.7			
6	281	1.6	1.6	-0.3	295	1.7	1.5	-0.7	300	4.0	3.5	-2.0	291	13.6	12.7	-5.0	274	23.9	23.8	-1.6	259	28.4	27.9	5.5	290	16.3	15.3	-5.6			
7	330	2.0	1.0	-1.7	315	2.0	1.4	-1.4	297	3.7	3.3	-1.7	284	11.5	11.2	-2.7	281	22.8	22.4	-4.5	275	25.9	25.8	-2.3	290	13.8	13.0	-4.7			
8	258	1.9	1.9	0.4	279	1.2	1.2	-0.2	291	5.0	4.7	-1.8	287	11.8	11.3	-3.4	272	25.2	25.2	-0.9	277	28.0	27.8	-3.3	280	12.7	12.5	-2.3			
9	253	2.4	2.3	0.7	275	2.5	2.5	-0.2	298	4.2	3.7	-2.0	279	13.5	13.3	-2.2	273	26.3	26.3	-1.2	280	25.4	25.0	-4.5	271	6.0	6.0	-0.1			
10	303	2.0	1.7	-1.1	287	2.1	2.0	-0.6	309	4.5	3.5	-2.8	289	12.5	11.8	-4.1	279	18.4	18.2	-3.0	276	24.8	24.7	-2.4	288	12.1	11.5	-3.8			
11	290	1.5	1.4	-0.5	291	1.7	1.6	-0.6	302	4.5	3.8	-2.4	298	12.7	11.2	-6.0	288	21.2	20.1	-6.6	273	26.5	26.5	-1.5	264	18.4	18.3	1.9			
12	331	3.3	1.6	-2.9	291	1.7	1.6	-0.6	305	4.5	3.7	-2.6	298	11.9	10.5	-5.5	288	19.5	18.6	-5.9	274	21.4	21.3	-1.6	297	11.0	9.8	-5.1			
13	317	2.1	1.4	-1.5	284	1.6	1.6	-0.4	291	3.3	3.1	-1.2	288	11.1	10.6	-3.4	280	23.9	23.5	-4.1	276	23.3	23.2	-2.3	280	16.9	16.7	-2.9			
14	284	0.8	0.8	-0.2	279	2.4	2.4	-0.4	304	3.0	2.5	-1.7	281	13.5	13.2	-2.6	276	29.3	29.1	-3.3	268	26.8	26.8	1.1	293	9.7	8.9	-3.8			
15	310	1.6	1.2	-1.0	294	2.4	2.2	-1.0	299	4.8	4.2	-2.3	285	14.8	14.3	-3.9	284	26.6	25.8	-6.5	276	24.7	24.6	-2.7	258	18.7	18.3	3.9			
16	251	1.8	1.7	0.6	261	2.5	2.5	0.4	283	7.4	7.2	-1.7	287	16.6	15.9	-4.9	270	25.9	25.9	0.1	264	24.3	24.2	2.5	261	10.9	10.8	1.8			
17	250	3.3	3.1	1.1	260	3.5	3.4	0.6	284	5.6	5.4	-1.3	283	18.7	18.2	-4.2	276	24.0	23.8	-2.7	268	28.0	28.0	0.9	267	10.7	10.7	0.5			
18	260	2.3	2.3	0.4	270	2.6	2.6	0.0	288	6.9	6.6	-2.1	289	16.4	15.5	-5.4	278	24.4	24.2	-3.2	265	24.0	23.9	2.2	314	8.3	6.0	-5.7			
19	246	2.7	2.5	1.1	276	2.0	2.0	-0.2	291	6.3	5.9	-2.3	283	15.7	15.3	-3.4	283	26.4	25.7	-6.1	262	25.8	25.5	3.7	251	13.6	12.9	4.4			
20	243	4.2	3.7	1.9	299	2.1	1.8	-1.0	287	5.0	4.8	-1.5	280	14.9	14.7	-2.6	277	21.4	21.2	-2.7	266	21.4	21.4	1.4	282	19.5	19.1	-3.9			
21	242	3.6	3.2	1.7	267	2.1	2.1	0.1	294	5.4	4.9	-2.2	280	14.9	14.7	-2.7	274	26.1	26.0	-1.7	270	27.3	27.3	0.2	283	14.0	13.7	-3.1			
22	272	3.3	3.3	-0.1	284	3.4	3.3	-0.8	297	5.9	5.2	-2.7	289	17.7	16.7	-5.9	275	25.5	25.4	-2.4	271	28.6	28.6	-0.4	262	14.0	13.9	2.0			
23	270	1.3	1.3	0.0	274	1.4	1.4	-0.1	297	4.5	4.0	-2.0	284	14.7	14.3	-3.6	277	24.4	24.2	-3.1	271	25.3	25.3	-0.3	271	12.9	12.9	-0.3			
24	260	1.7	1.7	0.3	254	1.5	1.4	0.4	302	3.8	3.2	-2.0	277	12.8	12.7	-1.5	277	23.1	22.9	-2.9	266	24.7	24.6	1.8	270	13.2	13.2	-0.1			
25	276	1.9	1.9	-0.2	276	2.0	2.0	-0.2	301	3.9	3.3	-2.0	281	13.7	13.5	-2.6	277	23.2	23.0	-2.7	276	24.7	24.6	-2.4	276	13.8	13.7	-1.5			
26	248	1.8	1.7	0.7	264	2.7	2.7	0.3	305	4.9	4.0	-2.8	282	14.4	14.1	-3.0	283	25.0	24.3	-5.8	277	25.2	25.0	-2.9	290	10.0	9.4	-3.5			
27	298	2.1	1.9	-1.0	288	2.5	2.4	-0.8	310	4.3	3.3	-2.8	285	12.8	12.4	-3.3	275	25.4	25.3	-2.4	281	23.8	23.4	-4.4	279	11.1	11.0	-1.8			
28	291	2.2	2.1	-0.8	281	3.1	3.0	-0.6	302	4.0	3.4	-2.1	293	13.3	12.2	-5.3	282	26.7	26.1	-5.7	278	25.2	25.0	-3.3	275	12.0	11.9	-1.1			
29	306	2.2	1.8	-1.3	304	2.9	2.4	-1.6	336	4.4	1.8	-4.0	311	16.6	12.6	-10.8	278	21.2	21.0	-2.9	268	22.3	22.3	0.8	66	1.0	-0.9	-0.4			

Daily Normals of Upper Air Winds (1971-2000)

JAGDALPUR

MARCH

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	322	2.8	1.7	-2.2	277	2.3	2.3	-0.3	303	3.3	2.8	-1.8	286	13.9	13.4	-3.8	277	24.4	24.2	-2.9	265	28.2	28.1	2.4	269	17.2	17.2	0.4			
2	319	2.8	1.8	-2.1	292	3.5	3.2	-1.3	294	4.8	4.4	-2.0	288	12.0	11.4	-3.7	280	24.2	23.9	-4.0	261	25.0	24.7	3.8	264	13.2	13.1	1.4			
3	295	2.1	1.9	-0.9	309	2.6	2.0	-1.6	314	4.7	3.4	-3.3	292	11.8	10.9	-4.4	282	21.7	21.2	-4.4	270	23.0	23.0	0.0	258	14.3	14.0	3.1			
4	298	2.1	1.9	-1.0	317	2.5	1.7	-1.8	316	4.3	3.0	-3.1	297	10.7	9.6	-4.8	284	23.0	22.3	-5.5	267	24.1	24.1	1.4	255	9.1	8.8	2.3			
5	228	1.2	0.9	0.8	288	1.3	1.2	-0.4	314	4.0	2.9	-2.8	287	13.7	13.1	-4.1	277	21.6	21.4	-2.6	269	22.1	22.1	0.3	276	15.5	15.4	-1.6			
6	251	1.8	1.7	0.6	275	2.1	2.1	-0.2	321	2.7	1.7	-2.1	284	12.6	12.2	-3.0	271	20.0	20.0	-0.4	266	24.1	24.1	1.5	247	7.1	6.5	2.8			
7	338	1.6	0.6	-1.5	292	1.6	1.5	-0.6	320	3.8	2.4	-2.9	280	12.7	12.5	-2.3	277	21.0	20.9	-2.4	270	22.0	22.0	0.0	283	12.8	12.5	-2.8			
8	283	1.3	1.3	-0.3	279	2.6	2.6	-0.4	314	3.2	2.3	-2.2	281	10.7	10.5	-2.0	272	23.3	23.3	-0.7	277	22.7	22.6	-2.6	272	13.4	13.4	-0.5			
9	283	2.8	2.7	-0.6	279	2.0	2.0	-0.3	307	3.1	2.5	-1.9	284	11.3	10.9	-2.8	275	22.7	22.6	-2.0	270	23.6	23.6	0.1	290	8.2	7.7	-2.8			
10	306	2.6	2.1	-1.5	278	2.1	2.1	-0.3	307	2.5	2.0	-1.5	279	12.4	12.2	-2.0	273	23.9	23.9	-1.2	266	27.6	27.5	1.9	294	14.8	13.5	-6.1			
11	275	2.5	2.5	-0.2	263	2.6	2.6	0.3	301	3.9	3.3	-2.0	278	11.3	11.2	-1.5	284	23.5	22.8	-5.8	277	21.1	21.0	-2.4	282	8.5	8.3	-1.8			
12	247	1.3	1.2	0.5	279	2.5	2.5	-0.4	299	4.5	3.9	-2.2	286	14.0	13.4	-3.9	269	24.4	24.4	0.4	264	23.5	23.4	2.5	190	4.0	0.7	3.9			
13	243	3.4	3.0	1.5	272	2.7	2.7	-0.1	311	4.0	3.0	-2.6	290	12.7	11.9	-4.4	272	23.5	23.5	-0.7	269	26.8	26.8	0.5	251	9.9	9.4	3.2			
14	255	2.3	2.2	0.6	274	3.0	3.0	-0.2	299	4.3	3.8	-2.1	293	12.1	11.2	-4.7	282	20.4	20.0	-4.1	277	23.4	23.2	-3.0	283	13.8	13.4	-3.1			
15	248	3.2	3.0	1.2	277	2.3	2.3	-0.3	331	3.3	1.6	-2.9	298	9.5	8.4	-4.5	283	21.4	20.9	-4.7	276	24.4	24.3	-2.6	260	9.9	9.8	1.7			
16	259	2.5	2.5	0.5	272	2.6	2.6	-0.1	310	4.0	3.1	-2.6	290	10.7	10.0	-3.7	282	19.0	18.6	-4.1	276	19.2	19.1	-1.9	276	9.9	9.8	-1.0			
17	274	3.0	3.0	-0.2	287	3.0	2.9	-0.9	313	3.8	2.8	-2.6	287	10.9	10.4	-3.1	278	18.6	18.4	-2.7	265	25.6	25.5	2.4	251	13.0	12.3	4.3			
18	292	3.5	3.3	-1.3	289	3.6	3.4	-1.2	306	3.9	3.2	-2.3	285	11.9	11.5	-3.0	270	19.1	19.1	-0.1	265	19.6	19.5	1.7	248	7.4	6.8	2.8			
19	303	3.0	2.5	-1.6	281	3.2	3.1	-0.6	311	4.5	3.4	-3.0	286	9.8	9.4	-2.7	277	20.5	20.3	-2.5	272	21.9	21.9	-0.9	241	7.3	6.4	3.5			
20	277	1.6	1.6	-0.2	277	3.1	3.1	-0.4	297	4.0	3.6	-1.8	290	11.4	10.7	-4.0	279	18.3	18.1	-2.9	274	20.3	20.2	-1.5	287	12.1	11.5	-3.6			
21	249	2.2	2.1	0.8	289	3.4	3.2	-1.1	304	4.0	3.3	-2.2	300	8.5	7.3	-4.3	289	16.4	15.5	-5.3	287	21.9	21.0	-6.3	294	11.3	10.3	-4.6			
22	235	3.8	3.1	2.2	276	2.8	2.8	-0.3	305	3.8	3.1	-2.2	286	10.7	10.3	-3.0	282	21.0	20.6	-4.3	282	18.9	18.5	-4.0	279	12.3	12.1	-2.0			
23	251	3.7	3.5	1.2	258	3.4	3.3	0.7	289	4.0	3.8	-1.3	296	10.8	9.7	-4.8	277	19.9	19.7	-2.5	262	23.2	23.0	3.2	270	8.8	8.8	0.0			
24	252	2.3	2.2	0.7	247	2.6	2.4	1.0	302	4.7	4.0	-2.5	287	10.7	10.2	-3.1	277	18.9	18.8	-2.2	272	26.7	26.7	-0.7	267	13.4	13.4	0.8			
25	247	2.6	2.4	1.0	270	2.6	2.6	0.0	280	4.5	4.4	-0.8	282	10.9	10.7	-2.2	267	21.0	21.0	1.2	263	25.4	25.2	3.2	262	15.2	15.0	2.2			
26	288	2.3	2.2	-0.7	273	3.5	3.5	-0.2	287	3.4	3.2	-1.0	291	12.3	11.5	-4.4	286	20.9	20.0	-5.9	280	24.9	24.5	-4.3	275	10.7	10.7	-1.0			
27	268	2.7	2.7	0.1	291	2.2	2.1	-0.8	305	4.2	3.4	-2.4	295	9.1	8.3	-3.8	282	18.5	18.1	-3.7	277	23.2	23.0	-2.7	268	13.2	13.2	0.4			
28	292	1.8	1.7	-0.7	273	2.1	2.1	-0.1	308	3.7	2.9	-2.3	295	8.3	7.5	-3.5	276	19.9	19.8	-2.1	275	21.2	21.1	-2.0	237	5.1	4.3	2.8			
29	255	3.0	2.9	0.8	284	3.2	3.1	-0.8	300	4.3	3.7	-2.1	304	11.9	9.8	-6.7	290	18.2	17.1	-6.2	274	21.1	21.0	-1.5	270	3.6	3.6	0.0			
30	256	2.5	2.4	0.6	276	3.0	3.0	-0.3	315	4.7	3.3	-3.3	302	8.8	7.5	-4.6	286	16.9	16.3	-4.6	270	18.1	18.1	-0.1	273	14.7	14.7	-0.7			
31	240	2.0	1.7	1.0	268	2.6	2.6	0.1	298	4.0	3.5	-1.9	301	8.2	7.1	-4.2	290	16.6	15.6	-5.8	264	19.1	19.0	2.0	290	13.1	12.3	-4.4			

Daily Normals of Upper Air Winds (1971-2000)

JAGDALPUR

APRIL

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	211	2.7	1.4	2.3	245	3.3	3.0	1.4	302	3.2	2.7	-1.7	291	8.0	7.5	-2.9	271	17.4	17.4	-0.3	267	19.7	19.7	1.0	266	5.2	5.2	0.4			
2	281	2.1	2.1	-0.4	264	3.6	3.6	0.4	296	2.5	2.3	-1.1	285	8.9	8.6	-2.3	268	19.4	19.4	0.6	266	19.1	19.0	1.4	252	7.7	7.3	2.4			
3	290	1.2	1.1	-0.4	270	2.1	2.1	0.0	300	3.2	2.8	-1.6	283	9.0	8.8	-2.1	274	18.6	18.5	-1.4	267	19.2	19.2	1.1	277	9.9	9.8	-1.2			
4	238	2.5	2.1	1.3	272	3.5	3.5	-0.1	294	2.4	2.2	-1.0	283	9.1	8.9	-2.1	272	21.6	21.6	-0.9	264	23.4	23.3	2.5	282	9.5	9.3	-2.0			
5	97	0.8	-0.8	0.1	298	2.1	1.9	-1.0	316	3.5	2.4	-2.5	275	8.5	8.5	-0.8	268	18.3	18.3	0.7	261	18.6	18.4	2.9	251	9.1	8.6	2.9			
6	264	1.8	1.8	0.2	273	2.1	2.1	-0.1	339	3.0	1.1	-2.8	300	7.8	6.8	-3.9	283	18.9	18.4	-4.1	277	20.3	20.1	-2.5	261	3.6	3.6	0.6			
7	254	1.5	1.4	0.4	312	3.0	2.2	-2.0	329	3.3	1.7	-2.8	302	7.8	6.6	-4.1	297	18.3	16.3	-8.4	271	18.0	18.0	-0.4	297	6.5	5.8	-2.9			
8	238	4.0	3.4	2.1	278	2.8	2.8	-0.4	315	3.4	2.4	-2.4	302	8.9	7.5	-4.7	280	18.1	17.8	-3.1	262	19.1	18.9	2.7	251	7.3	6.9	2.4			
9	226	2.9	2.1	2.0	263	2.6	2.6	0.3	308	3.3	2.6	-2.0	297	9.2	8.2	-4.1	272	20.7	20.7	-0.8	262	22.8	22.6	3.1	249	5.3	4.9	1.9			
10	270	1.2	1.2	0.0	268	3.2	3.2	0.1	301	3.7	3.2	-1.9	304	7.6	6.3	-4.2	275	19.5	19.4	-1.7	264	21.8	21.7	2.3	278	6.4	6.3	-0.9			
11	235	2.1	1.7	1.2	254	3.5	3.4	1.0	312	2.4	1.8	-1.6	288	7.3	6.9	-2.3	278	17.2	17.0	-2.4	271	20.0	20.0	-0.5	254	8.5	8.2	2.4			
12	309	1.3	1.0	-0.8	291	3.1	2.9	-1.1	302	4.0	3.4	-2.1	319	7.4	4.9	-5.6	289	15.1	14.3	-4.9	262	16.9	16.7	2.4	283	5.8	5.7	-1.3			
13	213	2.4	1.3	2.0	253	2.8	2.7	0.8	325	2.8	1.6	-2.3	299	8.1	7.1	-3.9	275	14.8	14.8	-1.2	264	18.6	18.5	2.0	268	10.0	10.0	0.4			
14	207	2.2	1.0	2.0	270	3.1	3.1	0.0	313	4.2	3.1	-2.9	287	6.4	6.1	-1.9	268	16.5	16.5	0.7	266	23.8	23.7	1.6	257	8.8	8.6	2.0			
15	252	1.9	1.8	0.6	259	2.1	2.1	0.4	297	2.2	2.0	-1.0	289	6.9	6.5	-2.2	269	17.7	17.7	0.4	258	21.5	21.1	4.3	258	11.9	11.7	2.4			
16	295	1.4	1.3	-0.6	282	2.9	2.8	-0.6	298	3.2	2.8	-1.5	278	8.7	8.6	-1.2	268	17.5	17.5	0.6	264	20.5	20.4	2.3	272	10.2	10.2	-0.4			
17	223	2.6	1.8	1.9	262	2.2	2.2	0.3	311	2.1	1.6	-1.4	312	5.7	4.2	-3.8	257	18.3	17.9	4.0	250	26.4	24.8	9.0	251	9.4	8.9	3.0			
18	253	1.4	1.3	0.4	291	1.9	1.8	-0.7	346	3.2	0.8	-3.1	308	6.6	5.2	-4.0	274	14.1	14.1	-0.9	264	19.4	19.3	2.0	232	1.1	0.9	0.7			
19	284	2.1	2.0	-0.5	288	2.5	2.4	-0.8	313	1.8	1.3	-1.2	299	7.9	6.9	-3.8	256	15.7	15.3	3.7	256	22.8	22.1	5.7	237	6.9	5.8	3.7			
20	270	1.8	1.8	0.0	315	2.8	2.0	-2.0	322	4.1	2.5	-3.2	291	9.0	8.4	-3.3	258	17.4	17.0	3.5	244	21.7	19.6	9.4	239	6.9	5.9	3.6			
21	256	3.0	2.9	0.7	274	2.6	2.6	-0.2	321	3.5	2.2	-2.7	300	6.1	5.3	-3.0	263	18.7	18.6	2.3	253	22.1	21.1	6.5	220	4.3	2.8	3.3			
22	247	2.5	2.3	1.0	282	2.4	2.3	-0.5	318	2.8	1.9	-2.1	297	6.5	5.8	-2.9	262	19.1	18.9	2.8	265	22.4	22.3	1.8	270	6.0	6.0	0.0			
23	333	0.2	0.1	-0.2	283	2.2	2.1	-0.5	325	3.2	1.8	-2.6	291	8.0	7.5	-2.9	262	17.6	17.4	2.5	258	16.4	16.0	3.4	330	3.4	1.7	-2.9			
24	240	3.8	3.3	1.9	252	2.6	2.5	0.8	310	4.3	3.3	-2.8	290	8.0	7.5	-2.7	263	15.6	15.5	1.9	266	20.9	20.9	1.4	271	8.2	8.2	-0.2			
25	270	2.0	2.0	0.0	273	1.9	1.9	-0.1	323	3.8	2.3	-3.0	308	7.4	5.8	-4.6	280	13.9	13.7	-2.5	262	18.3	18.1	2.6	278	8.2	8.1	-1.1			
26	244	3.7	3.3	1.6	274	2.8	2.8	-0.2	333	4.0	1.8	-3.6	315	6.6	4.7	-4.7	290	16.3	15.3	-5.6	253	17.8	17.0	5.2	233	5.9	4.7	3.6			
27	352	1.4	0.2	-1.4	275	2.4	2.4	-0.2	323	3.5	2.1	-2.8	317	6.9	4.7	-5.0	280	12.7	12.5	-2.3	264	16.2	16.1	1.7	68	0.5	-0.5	-0.2			
28	260	2.8	2.8	0.5	285	3.1	3.0	-0.8	340	4.0	1.4	-3.8	311	5.3	4.0	-3.5	284	15.3	14.9	-3.6	261	18.9	18.7	3.0	221	5.3	3.5	4.0			
29	175	1.2	-0.1	1.2	294	3.2	2.9	-1.3	331	5.4	2.6	-4.7	317	7.1	4.8	-5.2	284	11.8	11.4	-2.9	275	13.9	13.9	-1.1	225	0.8	0.6	0.6			
30	272	2.3	2.3	-0.1	307	2.6	2.1	-1.6	343	3.0	0.9	-2.9	327	7.2	3.9	-6.1	286	11.9	11.4	-3.3	273	15.2	15.2	-0.8	50	3.8	-2.9	-2.4			

Daily Normals of Upper Air Winds (1971-2000)

JAGDALPUR

MAY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	215	4.0	2.3	3.3	303	1.7	1.4	-0.9	356	4.7	0.3	-4.7	308	6.0	4.7	-3.7	269	12.7	12.7	0.3	260	13.0	12.8	2.3	216	5.7	3.4	4.6			
2	265	2.3	2.3	0.2	290	2.9	2.7	-1.0	323	3.0	1.8	-2.4	318	5.4	3.6	-4.0	268	13.0	13.0	0.4	241	12.7	11.1	6.1	180	1.6	0.0	1.6			
3	221	3.5	2.3	2.6	291	3.1	2.9	-1.1	331	4.1	2.0	-3.6	318	6.9	4.6	-5.1	284	9.7	9.4	-2.4	277	9.3	9.2	-1.2	158	4.3	-1.6	4.0			
4	234	2.2	1.8	1.3	288	2.0	1.9	-0.6	328	3.2	1.7	-2.7	307	5.8	4.6	-3.5	282	12.4	12.1	-2.5	266	13.1	13.1	0.9	61	1.8	-1.6	-0.9			
5	200	4.8	1.6	4.5	265	3.5	3.5	0.3	325	5.1	2.9	-4.2	310	6.5	5.0	-4.2	266	13.3	13.3	1.0	263	14.5	14.4	1.7	235	3.7	3.0	2.1			
6	216	4.1	2.4	3.3	275	2.3	2.3	-0.2	338	3.8	1.4	-3.5	298	5.5	4.8	-2.6	269	12.9	12.9	0.3	255	13.2	12.8	3.4	144	1.9	-1.1	1.5			
7	205	1.4	0.6	1.3	288	1.9	1.8	-0.6	339	3.6	1.3	-3.4	320	4.8	3.1	-3.7	255	14.7	14.2	3.8	241	13.2	11.5	6.4	144	5.4	-3.2	4.4			
8	205	1.7	0.7	1.5	273	1.8	1.8	-0.1	358	3.1	0.1	-3.1	313	1.6	1.2	-1.1	261	9.5	9.4	1.5	243	11.0	9.8	4.9	163	5.1	-1.5	4.9			
9	302	1.5	1.3	-0.8	317	2.1	1.4	-1.5	353	2.3	0.3	-2.3	300	4.4	3.8	-2.2	269	8.2	8.2	0.2	248	9.2	8.5	3.5	97	4.8	-4.8	0.6			
10	283	2.6	2.5	-0.6	301	2.6	2.2	-1.3	299	2.5	2.2	-1.2	271	4.1	4.1	-0.1	271	9.7	9.7	-0.1	234	11.9	9.6	7.1	94	3.2	-3.2	0.2			
11	288	3.3	3.1	-1.0	279	2.6	2.6	-0.4	311	3.2	2.4	-2.1	292	6.6	6.1	-2.5	267	12.7	12.7	0.6	250	9.9	9.3	3.4	121	5.7	-4.9	3.0			
12	337	1.5	0.6	-1.4	282	1.9	1.9	-0.4	331	3.8	1.8	-3.3	313	5.6	4.1	-3.8	267	11.0	11.0	0.5	262	10.4	10.3	1.5	180	3.0	0.0	3.0			
13	265	1.2	1.2	0.1	278	2.7	2.7	-0.4	350	5.0	0.9	-4.9	325	5.9	3.4	-4.8	268	7.2	7.2	0.3	244	8.3	7.5	3.6	107	8.7	-8.3	2.5			
14	240	2.2	1.9	1.1	264	1.8	1.8	0.2	356	4.4	0.3	-4.4	319	5.7	3.7	-4.3	281	7.7	7.6	-1.5	287	5.2	5.0	-1.5	126	5.2	-4.2	3.1			
15	225	2.8	2.0	2.0	270	3.5	3.5	0.0	346	5.4	1.3	-5.2	325	5.9	3.4	-4.8	278	6.4	6.3	-0.9	223	3.3	2.2	2.4	85	4.2	-4.2	-0.4			
16	245	1.4	1.3	0.6	272	3.2	3.2	-0.1	352	5.0	0.7	-5.0	319	6.1	4.0	-4.6	269	7.5	7.5	0.1	254	5.1	4.9	1.4	118	9.7	-8.6	4.5			
17	250	2.3	2.2	0.8	309	2.2	1.7	-1.4	331	5.3	2.6	-4.6	318	8.6	5.7	-6.4	287	7.1	6.8	-2.1	254	7.1	6.8	2.0	27	0.4	-0.2	-0.4			
18	191	0.5	0.1	0.5	320	3.4	2.2	-2.6	336	7.4	3.0	-6.8	330	7.0	3.5	-6.1	261	9.7	9.6	1.5	249	7.7	7.2	2.8	112	6.8	-6.3	2.5			
19	276	1.8	1.8	-0.2	328	2.5	1.3	-2.1	332	5.1	2.4	-4.5	334	5.9	2.6	-5.3	264	5.6	5.6	0.6	225	7.6	5.4	5.4	104	7.5	-7.3	1.8			
20	249	1.9	1.8	0.7	305	2.8	2.3	-1.6	327	4.4	2.4	-3.7	329	5.4	2.8	-4.6	263	5.0	5.0	0.6	204	4.3	1.7	3.9	101	8.6	-8.5	1.6			
21	253	3.0	2.9	0.9	277	3.1	3.1	-0.4	339	4.7	1.7	-4.4	324	4.9	2.9	-4.0	266	6.7	6.7	0.5	232	7.3	5.8	4.5	102	8.4	-8.2	1.7			
22	253	2.8	2.7	0.8	307	4.0	3.2	-2.4	348	5.4	1.1	-5.3	330	5.6	2.8	-4.9	266	5.6	5.6	0.4	197	5.7	1.7	5.4	106	7.5	-7.2	2.0			
23	279	2.5	2.5	-0.4	309	3.8	3.0	-2.4	345	5.2	1.3	-5.0	326	6.9	3.9	-5.7	275	5.4	5.4	-0.5	199	5.3	1.7	5.0	111	11.6	-10.8	4.1			
24	248	1.1	1.0	0.4	310	3.3	2.5	-2.1	348	4.2	0.9	-4.1	347	5.5	1.2	-5.4	267	3.8	3.8	0.2	209	4.3	2.1	3.8	114	8.3	-7.6	3.4			
25	295	3.8	3.5	-1.6	304	3.2	2.7	-1.8	354	4.1	0.4	-4.1	334	5.8	2.5	-5.2	261	1.8	1.8	0.3	209	2.3	1.1	2.0	116	11.9	-10.7	5.3			
26	227	3.5	2.6	2.4	286	2.5	2.4	-0.7	1	4.4	-0.1	-4.4	352	4.3	0.6	-4.3	279	3.1	3.1	-0.5	195	4.2	1.1	4.1	114	7.9	-7.2	3.2			
27	219	3.8	2.4	3.0	308	3.3	2.6	-2.0	354	4.9	0.5	-4.9	334	5.1	2.2	-4.6	291	2.6	2.4	-0.9	183	3.5	0.2	3.5	95	9.8	-9.8	0.8			
28	238	4.4	3.7	2.3	292	3.8	3.5	-1.4	351	4.6	0.7	-4.5	331	4.7	2.3	-4.1	231	2.7	2.1	1.7	149	3.5	-1.8	3.0	106	12.2	-11.7	3.4			
29	259	4.3	4.2	0.8	284	3.3	3.2	-0.8	327	4.0	2.2	-3.4	338	4.5	1.7	-4.2	247	4.4	4.1	1.7	177	5.2	-0.3	5.2	109	13.0	-12.3	4.2			
30	283	4.6	4.5	-1.0	301	2.1	1.8	-1.1	330	2.8	1.4	-2.4	330	3.2	1.6	-2.8	229	3.0	2.3	2.0	163	5.2	-1.5	5.0	112	12.5	-11.6	4.7			
31	225	3.4	2.4	2.4	282	3.0	2.9	-0.6	334	3.2	1.4	-2.9	270	1.7	1.7	0.0	235	2.1	1.7	1.2	146	5.0	-2.8	4.2	110	9.7	-9.1	3.4			

Daily Normals of Upper Air Winds (1971-2000)

JAGDALPUR

JUNE

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	265	2.2	2.2	0.2	318	2.5	1.7	-1.9	349	3.2	0.6	-3.1	318	3.8	2.5	-2.8	162	2.0	-0.6	1.9	157	7.5	-3.0	6.9	127	15.3	-12.2	9.3
2	235	2.1	1.7	1.2	299	2.5	2.2	-1.2	352	3.7	0.5	-3.7	326	2.9	1.6	-2.4	165	1.1	-0.3	1.1	156	6.0	-2.4	5.5	100	13.9	-13.7	2.4
3	294	2.4	2.2	-1.0	339	2.8	1.0	-2.6	3	4.2	-0.2	-4.2	311	5.0	3.8	-3.3	209	1.0	0.5	0.9	137	5.7	-3.9	4.2	103	15.6	-15.2	3.5
4	283	3.1	3.0	-0.7	306	2.6	2.1	-1.5	5	3.8	-0.3	-3.8	317	1.9	1.3	-1.4	124	1.4	-1.2	0.8	131	6.3	-4.8	4.1	95	15.0	-15.0	1.2
5	303	2.0	1.7	-1.1	306	1.7	1.4	-1.0	13	2.6	-0.6	-2.5	353	2.3	0.3	-2.3	146	1.8	-1.0	1.5	136	5.9	-4.1	4.3	101	12.2	-12.0	2.3
6	257	1.8	1.8	0.4	280	2.2	2.2	-0.4	338	2.4	0.9	-2.2	312	3.6	2.7	-2.4	92	2.4	-2.4	0.1	123	6.7	-5.6	3.6	105	17.7	-17.1	4.6
7	225	3.3	2.3	2.3	279	3.0	3.0	-0.5	333	2.9	1.3	-2.6	320	3.4	2.2	-2.6	65	1.9	-1.7	-0.8	107	6.8	-6.5	2.0	88	18.0	-18.0	-0.5
8	265	2.4	2.4	0.2	295	3.1	2.8	-1.3	328	3.2	1.7	-2.7	354	3.0	0.3	-3.0	61	3.7	-3.2	-1.8	108	4.2	-4.0	1.3	86	17.1	-17.1	-1.1
9	251	1.8	1.7	0.6	283	3.7	3.6	-0.8	332	2.7	1.3	-2.4	307	2.6	2.1	-1.6	67	5.0	-4.6	-2.0	96	8.2	-8.2	0.8	90	17.4	-17.4	0.1
10	207	3.6	1.6	3.2	273	5.0	5.0	-0.3	341	3.1	1.0	-2.9	328	3.6	1.9	-3.1	74	4.1	-3.9	-1.1	97	7.6	-7.5	0.9	95	14.2	-14.1	1.2
11	264	2.8	2.8	0.3	277	3.5	3.5	-0.4	328	4.4	2.3	-3.7	331	5.0	2.4	-4.4	43	5.0	-3.4	-3.6	114	8.1	-7.4	3.3	101	18.9	-18.5	3.7
12	238	2.2	1.9	1.2	287	3.1	3.0	-0.9	352	2.8	0.4	-2.8	5	2.5	-0.2	-2.5	70	3.8	-3.6	-1.3	100	10.5	-10.3	1.8	107	21.7	-20.8	6.2
13	193	2.2	0.5	2.1	279	3.1	3.1	-0.5	356	3.1	0.2	-3.1	356	2.6	0.2	-2.6	96	5.7	-5.7	0.6	107	12.8	-12.3	3.7	102	17.8	-17.4	3.8
14	235	1.2	1.0	0.7	306	2.4	1.9	-1.4	10	3.9	-0.7	-3.8	48	1.3	-1.0	-0.9	104	4.1	-4.0	1.0	98	7.0	-6.9	1.0	100	18.1	-17.8	3.1
15	225	4.2	3.0	3.0	279	3.6	3.6	-0.6	5	3.7	-0.3	-3.7	19	1.8	-0.6	-1.7	68	4.5	-4.2	-1.7	90	14.6	-14.6	-0.1	95	19.3	-19.2	1.7
16	262	3.6	3.6	0.5	277	4.1	4.1	-0.5	339	4.8	1.7	-4.5	316	4.2	2.9	-3.0	59	3.1	-2.7	-1.6	100	11.2	-11.0	2.0	91	20.4	-20.4	0.4
17	253	5.9	5.6	1.7	272	6.5	6.5	-0.2	314	4.9	3.5	-3.4	318	2.8	1.9	-2.1	60	5.2	-4.5	-2.6	87	10.5	-10.5	-0.5	102	19.5	-19.0	4.2
18	242	4.4	3.9	2.1	265	7.9	7.9	0.7	287	7.0	6.7	-2.0	294	4.2	3.8	-1.7	77	5.5	-5.4	-1.2	83	10.1	-10.0	-1.2	96	17.2	-17.1	1.7
19	233	4.8	3.8	2.9	267	6.3	6.3	0.3	300	5.3	4.6	-2.7	285	4.1	4.0	-1.1	85	3.6	-3.6	-0.3	102	12.5	-12.2	2.7	100	21.2	-20.9	3.6
20	252	4.1	3.9	1.3	274	6.3	6.3	-0.4	301	7.7	6.6	-3.9	296	5.2	4.7	-2.3	80	5.4	-5.3	-0.9	90	11.8	-11.8	-0.1	98	21.5	-21.3	2.9
21	246	4.8	4.4	2.0	292	5.7	5.3	-2.1	312	6.4	4.7	-4.3	309	4.3	3.3	-2.7	99	5.0	-4.9	0.8	90	13.1	-13.1	0.1	97	23.6	-23.4	2.9
22	245	5.2	4.7	2.2	284	6.2	6.0	-1.5	305	6.4	5.2	-3.7	296	3.9	3.5	-1.7	82	6.0	-5.9	-0.8	87	10.2	-10.2	-0.6	98	20.3	-20.1	2.7
23	261	3.9	3.9	0.6	295	6.5	5.9	-2.8	307	7.1	5.7	-4.3	307	3.6	2.9	-2.2	68	5.3	-4.9	-2.0	91	13.6	-13.6	0.2	98	23.7	-23.5	3.3
24	254	5.6	5.4	1.5	289	7.9	7.5	-2.6	308	6.3	5.0	-3.9	315	3.7	2.6	-2.6	81	4.7	-4.6	-0.7	93	14.8	-14.8	0.8	104	25.9	-25.1	6.2
25	251	4.2	4.0	1.4	287	7.8	7.5	-2.3	305	7.1	5.8	-4.1	317	3.5	2.4	-2.6	92	6.8	-6.8	0.2	106	12.2	-11.7	3.3	93	26.8	-26.8	1.5
26	256	4.0	3.9	1.0	278	6.6	6.5	-0.9	306	7.9	6.4	-4.6	319	4.0	2.6	-3.0	75	6.6	-6.4	-1.7	82	17.0	-16.8	-2.5	88	29.8	-29.8	-1.3
27	251	4.0	3.8	1.3	278	7.2	7.1	-1.0	295	6.4	5.8	-2.7	315	2.5	1.8	-1.8	88	7.1	-7.1	-0.3	91	16.6	-16.6	0.3	89	29.0	-29.0	-0.6
28	236	4.3	3.6	2.4	267	5.9	5.9	0.3	293	5.7	5.3	-2.2	303	2.4	2.0	-1.3	98	4.8	-4.7	0.7	87	15.7	-15.7	-0.8	89	26.7	-26.7	-0.3
29	233	3.0	2.4	1.8	268	5.6	5.6	0.2	290	5.4	5.1	-1.9	303	2.7	2.3	-1.5	104	7.0	-6.8	1.7	94	15.4	-15.4	1.1	91	25.6	-25.6	0.3
30	226	4.7	3.4	3.3	275	6.2	6.2	-0.5	292	5.6	5.2	-2.1	295	2.6	2.4	-1.1	91	8.4	-8.4	0.2	86	17.4	-17.4	-1.2	101	33.8	-33.1	6.6

Daily Normals of Upper Air Winds (1971-2000)

JAGDALPUR

JULY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	231	3.3	2.6	2.1	282	5.6	5.5	-1.2	293	5.0	4.6	-2.0	292	3.8	3.5	-1.4	93	6.8	-6.8	0.4	96	17.4	-17.3	1.8	92	30.8	-30.8	1.2
2	253	4.1	3.9	1.2	278	4.9	4.8	-0.7	294	3.7	3.4	-1.5	290	2.3	2.2	-0.8	80	7.2	-7.1	-1.2	100	16.5	-16.2	2.9	89	26.7	-26.7	-0.3
3	250	3.0	2.8	1.0	281	5.7	5.6	-1.1	293	6.3	5.8	-2.5	309	2.6	2.0	-1.6	101	7.6	-7.5	1.5	105	15.9	-15.4	4.1	91	27.9	-27.9	0.4
4	252	3.8	3.6	1.2	276	6.9	6.9	-0.7	287	7.2	6.9	-2.1	288	2.6	2.5	-0.8	105	5.2	-5.0	1.3	96	15.2	-15.1	1.5	95	26.5	-26.4	2.2
5	257	2.2	2.1	0.5	281	5.1	5.0	-1.0	288	6.3	6.0	-1.9	281	2.0	2.0	-0.4	89	9.1	-9.1	-0.1	95	15.6	-15.5	1.3	95	27.5	-27.4	2.5
6	242	4.4	3.9	2.1	281	6.3	6.2	-1.2	299	6.5	5.7	-3.1	307	3.8	3.0	-2.3	92	5.6	-5.6	0.2	94	15.4	-15.4	1.1	98	32.4	-32.1	4.4
7	233	5.8	4.6	3.5	269	8.2	8.2	0.1	287	7.7	7.4	-2.3	288	2.8	2.7	-0.9	102	7.4	-7.2	1.5	107	17.3	-16.5	5.1	82	29.2	-28.9	-4.1
8	262	5.0	5.0	0.7	273	6.7	6.7	-0.3	283	6.7	6.5	-1.5	278	3.4	3.4	-0.5	98	6.8	-6.7	0.9	98	19.0	-18.8	2.5	94	31.6	-31.5	2.2
9	264	4.8	4.8	0.5	282	7.8	7.6	-1.6	292	7.4	6.8	-2.8	346	1.2	0.3	-1.2	92	9.2	-9.2	0.3	92	18.1	-18.1	0.7	99	32.5	-32.1	4.9
10	237	5.0	4.2	2.7	284	6.6	6.4	-1.6	299	6.0	5.3	-2.9	3	1.9	-0.1	-1.9	99	7.5	-7.4	1.2	94	15.6	-15.6	1.0	84	27.0	-26.8	-2.9
11	245	3.8	3.5	1.6	278	6.4	6.3	-0.9	292	6.8	6.3	-2.5	7	1.7	-0.2	-1.7	107	6.1	-5.8	1.8	93	18.0	-18.0	1.0	87	32.4	-32.3	-1.8
12	247	4.0	3.7	1.6	277	6.4	6.3	-0.8	293	6.1	5.6	-2.4	52	1.1	-0.9	-0.7	103	10.3	-10.0	2.4	88	16.8	-16.8	-0.7	97	31.1	-30.9	3.7
13	260	4.6	4.5	0.8	275	6.5	6.5	-0.6	289	5.9	5.6	-1.9	252	0.9	0.9	0.3	97	8.7	-8.6	1.1	82	16.1	-15.9	-2.2	94	32.7	-32.6	2.5
14	265	3.7	3.7	0.3	284	5.7	5.5	-1.4	285	5.1	4.9	-1.3	298	2.1	1.9	-1.0	95	8.7	-8.7	0.7	94	18.2	-18.2	1.3	94	25.2	-25.1	1.9
15	260	4.7	4.6	0.8	284	6.1	5.9	-1.5	297	5.6	5.0	-2.6	48	1.3	-1.0	-0.9	91	9.5	-9.5	0.2	96	16.6	-16.5	1.7	92	30.2	-30.2	1.0
16	232	3.9	3.1	2.4	266	4.8	4.8	0.3	288	6.7	6.4	-2.1	63	2.5	-2.2	-1.1	97	8.9	-8.8	1.1	100	16.3	-16.1	2.7	90	36.9	-36.9	0.3
17	246	4.7	4.3	1.9	280	7.2	7.1	-1.2	294	4.8	4.4	-2.0	360	0.6	0.0	-0.6	102	9.7	-9.5	2.1	95	19.6	-19.5	1.8	79	39.9	-39.2	-7.6
18	270	4.6	4.6	0.0	276	8.1	8.1	-0.8	284	6.1	5.9	-1.5	343	1.7	0.5	-1.6	115	8.9	-8.1	3.7	92	20.7	-20.7	0.6	84	31.6	-31.4	-3.2
19	273	3.7	3.7	-0.2	281	7.7	7.6	-1.5	288	7.1	6.7	-2.2	295	3.3	3.0	-1.4	93	7.0	-7.0	0.4	87	16.6	-16.6	-0.9	83	31.4	-31.2	-3.8
20	260	5.0	4.9	0.9	283	8.7	8.5	-2.0	293	9.3	8.6	-3.6	298	3.2	2.8	-1.5	92	6.7	-6.7	0.2	86	17.0	-17.0	-1.2	96	30.6	-30.5	3.0
21	258	5.0	4.9	1.0	291	8.0	7.5	-2.9	296	7.5	6.7	-3.3	334	3.0	1.3	-2.7	94	6.2	-6.2	0.4	95	14.8	-14.7	1.3	92	28.3	-28.3	1.2
22	261	4.9	4.8	0.8	291	7.0	6.5	-2.5	304	8.1	6.7	-4.6	328	1.9	1.0	-1.6	79	7.0	-6.9	-1.4	88	15.6	-15.6	-0.5	88	30.0	-30.0	-1.0
23	255	5.7	5.5	1.5	276	8.1	8.1	-0.9	277	6.9	6.9	-0.8	225	1.7	1.2	1.2	113	8.2	-7.5	3.2	90	18.2	-18.2	0.0	88	32.6	-32.6	-1.1
24	263	4.3	4.3	0.5	272	7.4	7.4	-0.3	279	9.0	8.9	-1.4	246	3.9	3.6	1.6	102	7.6	-7.4	1.6	92	14.7	-14.7	0.5	90	27.4	-27.4	-0.1
25	253	3.7	3.5	1.1	282	7.7	7.5	-1.6	287	8.4	8.0	-2.5	283	0.9	0.9	-0.2	83	6.6	-6.6	-0.8	86	18.1	-18.0	-1.4	88	32.3	-32.3	-0.9
26	262	5.8	5.7	0.8	286	9.5	9.1	-2.6	291	9.6	9.0	-3.4	319	5.2	3.4	-3.9	82	5.9	-5.8	-0.8	89	14.4	-14.4	-0.2	92	29.0	-29.0	1.0
27	274	3.1	3.1	-0.2	285	8.3	8.0	-2.2	290	8.1	7.6	-2.7	299	5.0	4.4	-2.4	83	7.3	-7.2	-0.9	82	14.2	-14.1	-1.9	84	30.7	-30.6	-3.0
28	270	3.2	3.2	0.0	286	5.3	5.1	-1.5	290	7.4	7.0	-2.5	270	2.5	2.5	0.0	106	6.8	-6.5	1.9	101	14.7	-14.4	2.9	91	29.0	-29.0	0.7
29	261	4.6	4.5	0.7	284	7.7	7.5	-1.9	288	8.7	8.3	-2.7	254	3.7	3.6	1.0	92	5.7	-5.7	0.2	102	15.0	-14.7	3.0	85	28.3	-28.2	-2.3
30	241	3.9	3.4	1.9	276	6.9	6.9	-0.7	284	6.3	6.1	-1.5	317	2.1	1.4	-1.5	95	9.8	-9.8	0.8	97	19.8	-19.6	2.5	103	32.4	-31.5	7.5
31	268	3.6	3.6	0.1	288	6.0	5.7	-1.9	293	6.0	5.5	-2.3	315	1.6	1.1	-1.1	105	7.5	-7.3	1.9	89	14.9	-14.9	-0.2	91	36.1	-36.1	0.7

Daily Normals of Upper Air Winds (1971-2000)

164

JAGDALPUR

AUGUST

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	260	5.1	5.0	0.9	287	8.2	7.8	-2.4	300	5.6	4.8	-2.8	344	2.6	0.7	-2.5	82	8.4	-8.3	-1.1	93	15.9	-15.9	0.8	90	30.8	-30.8	0.0			
2	252	4.4	4.2	1.4	280	7.2	7.1	-1.2	286	6.1	5.9	-1.7	304	2.3	1.9	-1.3	84	7.2	-7.2	-0.7	93	16.5	-16.5	0.9	93	24.8	-24.8	1.1			
3	263	4.3	4.3	0.5	286	7.4	7.1	-2.0	282	5.8	5.7	-1.2	298	3.4	3.0	-1.6	88	9.5	-9.5	-0.4	86	15.9	-15.9	-1.0	90	28.8	-28.8	-0.2			
4	264	4.0	4.0	0.4	294	8.1	7.4	-3.3	292	6.8	6.3	-2.5	315	2.3	1.6	-1.6	105	6.0	-5.8	1.6	86	14.9	-14.9	-1.1	91	28.3	-28.3	0.4			
5	250	4.7	4.4	1.6	289	8.6	8.1	-2.8	301	7.5	6.4	-3.9	333	2.7	1.2	-2.4	83	6.1	-6.1	-0.7	97	14.1	-14.0	1.6	94	25.4	-25.3	1.6			
6	264	3.9	3.9	0.4	275	7.4	7.4	-0.7	290	6.6	6.2	-2.3	326	2.9	1.6	-2.4	68	7.2	-6.7	-2.7	81	12.8	-12.7	-1.9	95	26.5	-26.4	2.4			
7	255	5.2	5.0	1.3	276	7.2	7.2	-0.7	284	6.8	6.6	-1.7	309	0.6	0.5	-0.4	72	6.5	-6.2	-2.0	88	15.6	-15.6	-0.6	92	28.1	-28.1	1.1			
8	268	5.1	5.1	0.2	278	6.8	6.7	-0.9	297	4.6	4.1	-2.1	74	0.7	-0.7	-0.2	107	7.6	-7.3	2.2	99	15.7	-15.5	2.4	88	28.1	-28.1	-0.8			
9	275	3.6	3.6	-0.3	285	5.3	5.1	-1.4	277	5.2	5.2	-0.6	213	2.4	1.3	2.0	111	9.3	-8.7	3.4	101	17.2	-16.9	3.3	94	27.0	-26.9	1.9			
10	263	3.8	3.8	0.5	272	4.9	4.9	-0.2	279	3.3	3.3	-0.5	42	1.3	-0.9	-1.0	97	8.0	-7.9	1.0	93	15.2	-15.2	0.8	86	28.0	-27.9	-2.0			
11	237	3.8	3.2	2.1	281	4.9	4.8	-0.9	293	4.7	4.3	-1.8	90	0.8	-0.8	0.0	82	7.6	-7.5	-1.0	94	16.9	-16.9	1.2	84	22.9	-22.8	-2.5			
12	233	4.3	3.4	2.6	282	7.0	6.8	-1.5	296	5.9	5.3	-2.6	360	0.3	0.0	-0.3	87	6.6	-6.6	-0.3	82	16.2	-16.0	-2.3	94	24.6	-24.5	1.9			
13	276	4.0	4.0	-0.4	287	7.3	7.0	-2.2	302	7.0	5.9	-3.7	36	1.7	-1.0	-1.4	94	8.9	-8.9	0.6	93	16.0	-16.0	0.9	96	32.6	-32.4	3.6			
14	272	5.8	5.8	-0.2	296	8.1	7.3	-3.6	303	5.9	5.0	-3.2	21	3.3	-1.2	-3.1	101	10.2	-10.0	2.0	97	16.6	-16.5	2.1	95	29.6	-29.5	2.4			
15	272	5.5	5.5	-0.2	295	6.8	6.1	-2.9	305	5.4	4.4	-3.1	37	1.0	-0.6	-0.8	94	8.7	-8.7	0.6	95	16.5	-16.4	1.5	95	26.7	-26.6	2.2			
16	265	4.2	4.2	0.4	285	6.0	5.8	-1.6	295	3.8	3.4	-1.6	54	1.4	-1.1	-0.8	102	8.0	-7.8	1.6	92	17.6	-17.6	0.5	92	25.2	-25.2	1.1			
17	287	3.9	3.7	-1.1	293	6.1	5.6	-2.4	305	5.5	4.5	-3.1	90	0.5	-0.5	0.0	104	6.9	-6.7	1.7	98	15.8	-15.6	2.2	95	28.2	-28.1	2.6			
18	263	6.4	6.4	0.8	289	8.1	7.7	-2.6	282	5.4	5.3	-1.1	141	1.3	-0.8	1.0	106	7.3	-7.0	2.0	97	14.9	-14.8	1.8	99	31.0	-30.6	4.7			
19	271	5.2	5.2	-0.1	289	7.4	7.0	-2.4	284	6.0	5.8	-1.4	50	0.8	-0.6	-0.5	84	7.4	-7.4	-0.8	89	14.1	-14.1	-0.2	105	18.5	-17.9	4.7			
20	261	5.5	5.4	0.9	288	6.3	6.0	-1.9	297	4.4	3.9	-2.0	66	2.0	-1.8	-0.8	91	9.9	-9.9	0.2	91	17.5	-17.5	0.2	86	25.5	-25.4	-1.6			
21	253	4.2	4.0	1.2	295	6.5	5.9	-2.7	309	4.4	3.4	-2.8	64	3.0	-2.7	-1.3	102	10.9	-10.7	2.2	94	18.4	-18.4	1.3	93	26.0	-26.0	1.5			
22	272	3.3	3.3	-0.1	303	5.0	4.2	-2.7	306	4.1	3.3	-2.4	309	0.6	0.5	-0.4	97	8.7	-8.6	1.0	89	18.1	-18.1	-0.4	97	28.0	-27.8	3.6			
23	221	1.8	1.2	1.4	293	4.0	3.7	-1.6	316	3.6	2.5	-2.6	299	1.3	1.1	-0.6	113	7.0	-6.5	2.7	84	14.9	-14.8	-1.6	93	31.2	-31.2	1.6			
24	297	1.6	1.4	-0.7	280	4.7	4.6	-0.8	280	4.6	4.5	-0.8	124	1.4	-1.2	0.8	98	8.9	-8.8	1.2	99	18.9	-18.7	2.8	100	25.8	-25.4	4.5			
25	270	3.3	3.3	0.0	280	5.0	4.9	-0.9	296	5.5	5.0	-2.4	305	1.9	1.6	-1.1	86	9.4	-9.4	-0.7	101	14.9	-14.6	2.8	96	25.1	-25.0	2.7			
26	258	3.4	3.3	0.7	293	3.8	3.5	-1.5	288	3.3	3.1	-1.0	23	2.5	-1.0	-2.3	97	4.9	-4.9	0.6	96	16.8	-16.7	1.8	104	30.7	-29.8	7.5			
27	268	3.3	3.3	0.1	296	6.2	5.6	-2.7	299	5.3	4.6	-2.6	327	3.5	1.9	-2.9	101	5.3	-5.2	1.0	94	13.9	-13.9	1.0	93	29.8	-29.7	1.8			
28	251	3.7	3.5	1.2	297	6.8	6.0	-3.1	303	6.9	5.8	-3.7	360	2.2	0.0	-2.2	92	7.5	-7.5	0.3	96	15.1	-15.0	1.7	90	26.2	-26.2	0.0			
29	259	6.0	5.9	1.1	300	6.1	5.3	-3.0	305	4.2	3.4	-2.4	207	0.2	0.1	0.2	100	9.9	-9.8	1.7	96	22.6	-22.5	2.2	106	24.8	-23.8	6.9			
30	260	4.5	4.4	0.8	297	5.1	4.5	-2.3	297	3.7	3.3	-1.7	90	1.1	-1.1	0.0	93	7.7	-7.7	0.4	101	14.7	-14.4	2.7	93	27.8	-27.8	1.5			
31	256	4.2	4.1	1.0	294	4.5	4.1	-1.8	311	4.3	3.2	-2.8	324	1.9	1.1	-1.5	102	8.7	-8.5	1.8	97	17.2	-17.1	2.1	94	27.2	-27.1	1.9			

Daily Normals of Upper Air Winds (1971-2000)

JAGDALPUR

SEPTEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	275	3.5	3.5	-0.3	284	5.0	4.9	-1.2	272	3.4	3.4	-0.1	90	0.8	-0.8	0.0	91	9.2	-9.2	0.2	98	18.1	-17.9	2.6	92	24.2	-24.2	1.0
2	268	4.9	4.9	0.2	285	4.1	4.0	-1.1	290	3.3	3.1	-1.1	322	1.1	0.7	-0.9	95	6.3	-6.3	0.5	91	16.9	-16.9	0.2	98	26.0	-25.7	3.6
3	282	2.9	2.8	-0.6	292	5.6	5.2	-2.1	298	4.2	3.7	-2.0	306	1.4	1.1	-0.8	103	7.7	-7.5	1.8	104	17.6	-17.1	4.2	100	22.8	-22.4	4.0
4	268	3.7	3.7	0.1	294	5.5	5.0	-2.2	298	7.0	6.2	-3.3	286	1.8	1.7	-0.5	92	6.1	-6.1	0.2	93	16.9	-16.9	0.9	93	29.2	-29.2	1.6
5	243	3.7	3.3	1.7	287	6.9	6.6	-2.0	286	5.2	5.0	-1.4	217	1.0	0.6	0.8	84	5.4	-5.4	-0.6	93	13.4	-13.4	0.6	91	23.2	-23.2	0.6
6	242	4.4	3.9	2.1	290	4.7	4.4	-1.6	296	5.3	4.8	-2.3	153	0.4	-0.2	0.4	89	5.7	-5.7	-0.1	98	13.6	-13.5	2.0	99	21.8	-21.5	3.3
7	256	3.8	3.7	0.9	294	4.6	4.2	-1.9	300	5.9	5.1	-2.9	41	1.1	-0.7	-0.8	94	5.7	-5.7	0.4	100	11.7	-11.5	2.0	97	22.7	-22.5	2.7
8	254	3.3	3.2	0.9	311	3.5	2.6	-2.3	342	2.8	0.9	-2.7	11	1.0	-0.2	-1.0	111	6.8	-6.4	2.4	90	12.1	-12.1	0.0	97	22.0	-21.8	2.7
9	298	1.7	1.5	-0.8	330	3.4	1.7	-3.0	342	3.5	1.1	-3.3	79	1.0	-1.0	-0.2	102	8.3	-8.1	1.7	108	11.7	-11.1	3.6	96	25.1	-24.9	2.8
10	301	1.7	1.5	-0.9	320	3.8	2.4	-2.9	320	3.3	2.1	-2.5	146	0.7	-0.4	0.6	101	7.0	-6.9	1.4	102	12.5	-12.2	2.6	101	20.9	-20.5	4.1
11	244	3.0	2.7	1.3	298	2.7	2.4	-1.3	300	0.8	0.7	-0.4	99	1.3	-1.3	0.2	105	5.4	-5.2	1.4	96	12.2	-12.1	1.2	94	19.8	-19.7	1.5
12	231	1.9	1.5	1.2	308	3.4	2.7	-2.1	300	2.8	2.4	-1.4	253	1.0	1.0	0.3	100	3.9	-3.8	0.7	100	11.7	-11.5	2.1	91	18.9	-18.9	0.3
13	247	1.5	1.4	0.6	304	2.9	2.4	-1.6	296	3.2	2.9	-1.4	241	1.8	1.6	0.9	96	4.4	-4.4	0.5	95	11.0	-11.0	0.9	92	17.5	-17.5	0.6
14	223	3.4	2.3	2.5	314	3.0	2.2	-2.1	285	2.8	2.7	-0.7	263	2.4	2.4	0.3	86	2.8	-2.8	-0.2	93	10.4	-10.4	0.5	91	17.5	-17.5	0.2
15	261	2.4	2.4	0.4	309	3.5	2.7	-2.2	317	2.2	1.5	-1.6	255	2.3	2.2	0.6	93	3.6	-3.6	0.2	100	9.3	-9.2	1.6	97	16.5	-16.4	2.1
16	250	3.2	3.0	1.1	308	2.8	2.2	-1.7	333	2.0	0.9	-1.8	292	0.5	0.5	-0.2	87	5.7	-5.7	-0.3	110	7.7	-7.3	2.6	96	14.5	-14.4	1.5
17	266	2.7	2.7	0.2	315	1.4	1.0	-1.0	347	0.9	0.2	-0.9	156	1.0	-0.4	0.9	89	5.8	-5.8	-0.1	105	8.4	-8.1	2.2	97	15.0	-14.9	1.9
18	288	2.9	2.8	-0.9	341	1.8	0.6	-1.7	328	1.5	0.8	-1.3	180	1.2	0.0	1.2	99	6.0	-5.9	0.9	115	10.1	-9.2	4.2	91	19.4	-19.4	0.5
19	296	3.9	3.5	-1.7	358	2.3	0.1	-2.3	351	1.2	0.2	-1.2	122	1.5	-1.3	0.8	100	5.6	-5.5	1.0	106	11.9	-11.5	3.2	103	16.6	-16.2	3.7
20	309	1.3	1.0	-0.8	358	2.8	0.1	-2.8	32	1.9	-1.0	-1.6	110	1.5	-1.4	0.5	117	6.6	-5.9	3.0	112	11.9	-11.1	4.4	92	15.6	-15.6	0.6
21	279	1.9	1.9	-0.3	16	2.5	-0.7	-2.4	80	1.7	-1.7	-0.3	112	2.2	-2.0	0.8	108	5.4	-5.1	1.7	111	10.7	-10.0	3.9	99	17.7	-17.5	2.8
22	12	1.4	-0.3	-1.4	34	2.2	-1.2	-1.8	98	1.5	-1.5	0.2	155	2.6	-1.1	2.4	92	5.1	-5.1	0.2	110	8.9	-8.3	3.1	110	12.4	-11.6	4.3
23	310	2.5	1.9	-1.6	99	0.6	-0.6	0.1	124	0.7	-0.6	0.4	122	1.5	-1.3	0.8	112	6.2	-5.8	2.3	109	8.7	-8.2	2.8	85	15.9	-15.8	-1.5
24	302	1.9	1.6	-1.0	153	0.2	-0.1	0.2	117	0.9	-0.8	0.4	144	2.2	-1.3	1.8	104	5.9	-5.7	1.4	104	9.5	-9.2	2.3	93	15.1	-15.1	0.7
25	301	2.3	2.0	-1.2	348	2.5	0.5	-2.4	3	1.7	-0.1	-1.7	14	0.8	-0.2	-0.8	98	3.4	-3.4	0.5	120	9.5	-8.2	4.8	105	13.1	-12.6	3.4
26	306	1.7	1.4	-1.0	342	2.2	0.7	-2.1	345	2.3	0.6	-2.2	259	2.5	2.5	0.5	101	2.0	-2.0	0.4	118	7.6	-6.7	3.5	97	15.0	-14.9	1.8
27	27	0.2	-0.1	-0.2	280	5.3	5.2	-0.9	360	2.2	0.0	-2.2	238	0.9	0.8	0.5	107	3.8	-3.6	1.1	116	7.1	-6.4	3.1	99	14.4	-14.2	2.3
28	56	1.1	-0.9	-0.6	11	1.6	-0.3	-1.6	22	1.6	-0.6	-1.5	204	1.0	0.4	0.9	109	3.4	-3.2	1.1	103	6.7	-6.5	1.5	103	14.1	-13.7	3.2
29	66	2.0	-1.8	-0.8	23	2.1	-0.8	-1.9	40	1.6	-1.0	-1.2	127	0.5	-0.4	0.3	130	3.0	-2.3	1.9	130	5.7	-4.4	3.7	103	8.1	-7.9	1.8
30	36	1.9	-1.1	-1.5	45	2.8	-2.0	-2.0	41	2.3	-1.5	-1.7	100	2.3	-2.3	0.4	109	3.6	-3.4	1.2	117	4.8	-4.3	2.2	102	10.9	-10.7	2.2

Daily Normals of Upper Air Winds (1971-2000)

166

JAGDALPUR

OCTOBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	11	1.5	-0.3	-1.5	46	3.0	-2.2	-2.1	65	1.9	-1.7	-0.8	159	2.6	-0.9	2.4	132	2.5	-1.9	1.7	131	6.5	-4.9	4.2	100	12.3	-12.1	2.1			
2	25	1.9	-0.8	-1.7	33	3.0	-1.6	-2.5	72	2.3	-2.2	-0.7	146	0.7	-0.4	0.6	155	3.3	-1.4	3.0	135	7.2	-5.1	5.1	105	12.5	-12.1	3.2			
3	28	2.1	-1.0	-1.9	41	3.2	-2.1	-2.4	77	1.8	-1.8	-0.4	141	1.4	-0.9	1.1	110	3.8	-3.6	1.3	135	5.8	-4.1	4.1	93	11.8	-11.8	0.6			
4	40	2.5	-1.6	-1.9	49	2.9	-2.2	-1.9	93	1.7	-1.7	0.1	210	0.8	0.4	0.7	151	2.9	-1.4	2.5	152	5.5	-2.6	4.8	114	8.2	-7.5	3.4			
5	55	2.9	-2.4	-1.7	62	2.7	-2.4	-1.3	66	1.2	-1.1	-0.5	196	1.8	0.5	1.7	187	3.2	0.4	3.2	151	5.5	-2.7	4.8	93	7.0	-7.0	0.4			
6	60	2.8	-2.4	-1.4	79	1.5	-1.5	-0.3	76	0.8	-0.8	-0.2	216	2.6	1.5	2.1	143	2.0	-1.2	1.6	158	7.3	-2.7	6.8	95	10.9	-10.9	0.9			
7	45	3.0	-2.1	-2.1	45	1.4	-1.0	-1.0	180	0.7	0.0	0.7	231	1.9	1.5	1.2	212	1.9	1.0	1.6	151	6.4	-3.1	5.6	89	9.8	-9.8	-0.2			
8	63	1.6	-1.4	-0.7	22	1.6	-0.6	-1.5	225	0.6	0.4	0.4	246	2.0	1.8	0.8	187	1.7	0.2	1.7	126	3.6	-2.9	2.1	96	8.3	-8.3	0.8			
9	53	3.0	-2.4	-1.8	36	2.4	-1.4	-1.9	304	0.7	0.6	-0.4	262	2.1	2.1	0.3	213	3.0	1.6	2.5	175	3.6	-0.3	3.6	93	5.9	-5.9	0.3			
10	21	2.8	-1.0	-2.6	28	3.2	-1.5	-2.8	315	0.4	0.3	-0.3	270	0.2	0.2	0.0	264	1.0	1.0	0.1	222	2.5	1.7	1.9	91	7.9	-7.9	0.2			
11	45	1.8	-1.3	-1.3	38	2.4	-1.5	-1.9	69	2.2	-2.1	-0.8	127	1.0	-0.8	0.6	183	1.7	0.1	1.7	197	3.9	1.1	3.7	100	5.6	-5.5	1.0			
12	33	2.0	-1.1	-1.7	21	3.0	-1.1	-2.8	15	1.6	-0.4	-1.5	125	1.2	-1.0	0.7	195	2.0	0.5	1.9	171	4.5	-0.7	4.4	95	6.1	-6.1	0.5			
13	32	3.9	-2.1	-3.3	35	4.0	-2.3	-3.3	49	3.7	-2.8	-2.4	79	0.5	-0.5	-0.1	246	3.7	3.4	1.5	189	6.7	1.0	6.6	116	6.4	-5.7	2.8			
14	40	3.8	-2.4	-2.9	37	4.3	-2.6	-3.4	44	3.0	-2.1	-2.2	265	2.3	2.3	0.2	246	4.5	4.1	1.8	199	10.5	3.4	9.9	164	2.5	-0.7	2.4			
15	16	2.9	-0.8	-2.8	32	3.9	-2.1	-3.3	47	4.0	-2.9	-2.7	24	3.0	-1.2	-2.7	231	2.1	1.6	1.3	211	8.4	4.3	7.2	162	8.5	-2.6	8.1			
16	24	3.4	-1.4	-3.1	52	3.9	-3.1	-2.4	65	3.3	-3.0	-1.4	252	0.3	0.3	0.1	213	4.9	2.7	4.1	192	5.8	1.2	5.7	137	2.3	-1.6	1.7			
17	42	3.6	-2.4	-2.7	44	4.2	-2.9	-3.0	45	2.0	-1.4	-1.4	261	0.6	0.6	0.1	205	2.3	1.0	2.1	180	4.4	0.0	4.4	132	7.2	-5.3	4.8			
18	15	3.0	-0.8	-2.9	30	2.2	-1.1	-1.9	42	1.2	-0.8	-0.9	249	0.9	0.8	0.3	233	3.0	2.4	1.8	214	5.9	3.3	4.9	128	4.6	-3.6	2.8			
19	50	1.6	-1.2	-1.0	32	2.5	-1.3	-2.1	45	0.7	-0.5	-0.5	235	1.9	1.6	1.1	238	5.3	4.5	2.8	226	6.6	4.8	4.6	143	5.6	-3.4	4.5			
20	10	1.7	-0.3	-1.7	33	2.7	-1.5	-2.3	204	1.2	0.5	1.1	233	3.1	2.5	1.9	242	3.8	3.4	1.8	220	5.2	3.4	4.0	105	5.6	-5.4	1.4			
21	15	3.4	-0.9	-3.3	39	3.3	-2.1	-2.6	299	1.0	0.9	-0.5	268	3.7	3.7	0.1	253	3.9	3.7	1.1	226	7.9	5.7	5.5	108	4.9	-4.7	1.5			
22	18	2.3	-0.7	-2.2	34	3.2	-1.8	-2.7	348	1.9	0.4	-1.9	270	1.8	1.8	0.0	258	4.2	4.1	0.9	217	6.9	4.2	5.5	123	5.9	-5.0	3.2			
23	39	1.9	-1.2	-1.5	36	2.9	-1.7	-2.3	16	1.8	-0.5	-1.7	267	3.7	3.7	0.2	262	7.4	7.3	1.0	238	8.5	7.2	4.5	146	4.6	-2.6	3.8			
24	28	3.8	-1.8	-3.4	39	3.3	-2.1	-2.6	16	0.7	-0.2	-0.7	295	2.9	2.6	-1.2	270	7.2	7.2	0.0	237	8.7	7.3	4.7	138	4.5	-3.0	3.3			
25	27	2.5	-1.1	-2.2	32	2.8	-1.5	-2.4	15	1.6	-0.4	-1.5	268	3.7	3.7	0.1	261	7.3	7.2	1.1	249	8.7	8.1	3.1	200	2.9	1.0	2.7			
26	30	3.8	-1.9	-3.3	30	3.6	-1.8	-3.1	16	1.9	-0.5	-1.8	287	2.4	2.3	-0.7	281	7.6	7.4	-1.5	240	11.0	9.5	5.5	230	2.3	1.8	1.5			
27	26	3.4	-1.5	-3.1	36	3.4	-2.0	-2.8	4	1.4	-0.1	-1.4	288	1.6	1.5	-0.5	269	7.7	7.7	0.2	234	10.2	8.3	6.0	206	5.9	2.6	5.3			
28	12	4.5	-0.9	-4.4	29	3.1	-1.5	-2.7	34	1.1	-0.6	-0.9	267	3.3	3.3	0.2	259	8.9	8.7	1.7	252	12.4	11.8	3.9	207	2.7	1.2	2.4			
29	13	3.9	-0.9	-3.8	39	3.5	-2.2	-2.7	45	1.7	-1.2	-1.2	300	3.0	2.6	-1.5	254	7.3	7.0	2.0	240	9.1	7.9	4.6	143	4.9	-2.9	3.9			
30	38	4.6	-2.8	-3.6	50	4.3	-3.3	-2.8	49	1.8	-1.4	-1.2	270	1.6	1.6	0.0	257	7.8	7.6	1.7	240	11.7	10.1	5.9	169	2.5	-0.5	2.5			
31	35	3.2	-1.8	-2.6	53	4.3	-3.4	-2.6	108	1.3	-1.2	0.4	237	2.7	2.3	1.5	259	8.9	8.7	1.7	228	10.8	8.0	7.2	124	1.1	-0.9	0.6			

Daily Normals of Upper Air Winds (1971-2000)

JAGDALPUR

NOVEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	35	4.9	-2.8	-4.0	57	4.6	-3.9	-2.5	68	1.1	-1.0	-0.4	249	2.5	2.3	0.9	262	9.5	9.4	1.3	241	12.8	11.2	6.2	152	2.1	-1.0	1.9			
2	37	4.0	-2.4	-3.2	58	4.0	-3.4	-2.1	95	1.2	-1.2	0.1	8	2.8	-0.4	-2.8	259	8.4	8.2	1.6	243	10.9	9.7	4.9	144	0.9	-0.5	0.7			
3	32	4.4	-2.3	-3.7	57	3.1	-2.6	-1.7	201	0.9	0.3	0.8	307	3.4	2.7	-2.0	259	10.5	10.3	2.0	244	12.6	11.3	5.6	170	4.6	-0.8	4.5			
4	27	4.2	-1.9	-3.7	38	3.6	-2.2	-2.8	293	1.3	1.2	-0.5	316	4.2	2.9	-3.0	260	11.5	11.3	1.9	247	14.1	12.9	5.6	175	4.3	-0.4	4.3			
5	29	4.8	-2.3	-4.2	48	3.6	-2.7	-2.4	310	1.6	1.2	-1.0	289	4.3	4.1	-1.4	261	10.5	10.4	1.7	247	12.4	11.4	4.8	211	2.7	1.4	2.3			
6	33	4.3	-2.3	-3.6	59	2.9	-2.5	-1.5	23	0.8	-0.3	-0.7	285	4.2	4.1	-1.1	264	10.6	10.5	1.1	252	14.6	13.9	4.4	245	5.5	5.0	2.3			
7	34	4.1	-2.3	-3.4	55	3.8	-3.1	-2.2	76	0.8	-0.8	-0.2	293	2.6	2.4	-1.0	280	9.1	9.0	-1.6	235	10.8	8.9	6.2	266	6.2	6.2	0.4			
8	34	2.5	-1.4	-2.1	37	3.1	-1.9	-2.5	18	1.3	-0.4	-1.2	289	4.6	4.4	-1.5	277	10.3	10.2	-1.2	247	10.6	9.8	4.1	268	5.8	5.8	0.2			
9	9	1.2	-0.2	-1.2	27	2.0	-0.9	-1.8	344	1.8	0.5	-1.7	275	6.4	6.4	-0.6	267	11.6	11.6	0.6	264	15.7	15.6	1.7	233	3.8	3.0	2.3			
10	14	3.4	-0.8	-3.3	36	2.6	-1.5	-2.1	274	1.3	1.3	-0.1	268	6.4	6.4	0.2	262	11.6	11.5	1.7	259	13.4	13.1	2.6	333	0.7	0.3	-0.6			
11	32	2.8	-1.5	-2.4	28	3.0	-1.4	-2.6	322	2.4	1.5	-1.9	301	5.0	4.3	-2.6	259	12.1	11.9	2.3	248	11.8	10.9	4.4	243	3.0	2.7	1.4			
12	13	2.3	-0.5	-2.2	44	3.3	-2.3	-2.4	254	3.7	3.6	1.0	336	3.6	1.5	-3.3	270	11.9	11.9	0.0	237	15.3	12.9	8.3	237	5.9	5.0	3.2			
13	19	3.7	-1.2	-3.5	51	3.2	-2.5	-2.0	66	1.2	-1.1	-0.5	320	4.5	2.9	-3.5	271	13.3	13.3	-0.3	246	18.0	16.4	7.3	240	4.2	3.6	2.1			
14	37	4.9	-2.9	-3.9	51	3.3	-2.6	-2.1	58	2.6	-2.2	-1.4	304	1.8	1.5	-1.0	271	11.7	11.7	-0.2	250	15.2	14.3	5.2	261	2.6	2.6	0.4			
15	42	5.0	-3.3	-3.7	47	4.1	-3.0	-2.8	59	3.3	-2.8	-1.7	334	3.9	1.7	-3.5	269	10.1	10.1	0.2	248	14.6	13.6	5.4	266	5.7	5.7	0.4			
16	72	2.8	-2.7	-0.9	45	2.0	-1.4	-1.4	73	1.4	-1.3	-0.4	302	3.1	2.6	-1.6	268	9.4	9.4	0.4	249	12.8	12.0	4.5	282	5.7	5.6	-1.2			
17	39	3.2	-2.0	-2.5	51	1.9	-1.5	-1.2	56	0.4	-0.3	-0.2	286	3.7	3.6	-1.0	263	12.9	12.8	1.5	250	15.8	14.8	5.5	300	3.2	2.8	-1.6			
18	27	2.8	-1.3	-2.5	11	2.5	-0.5	-2.5	343	1.0	0.3	-1.0	282	4.9	4.8	-1.0	265	14.6	14.5	1.3	252	18.9	18.0	5.9	259	3.6	3.5	0.7			
19	14	3.0	-0.7	-2.9	16	2.5	-0.7	-2.4	321	1.4	0.9	-1.1	284	5.4	5.2	-1.3	256	15.3	14.9	3.6	240	16.1	13.9	8.1	228	7.6	5.7	5.1			
20	25	2.9	-1.2	-2.6	24	2.4	-1.0	-2.2	347	2.3	0.5	-2.2	291	5.3	5.0	-1.9	257	16.1	15.7	3.7	237	17.6	14.7	9.7	251	4.6	4.3	1.5			
21	36	3.4	-2.0	-2.8	37	2.5	-1.5	-2.0	331	2.3	1.1	-2.0	274	6.8	6.8	-0.5	254	19.8	19.1	5.4	243	20.1	17.9	9.1	275	4.4	4.4	-0.4			
22	27	2.2	-1.0	-2.0	23	2.6	-1.0	-2.4	345	1.6	0.4	-1.5	276	6.3	6.3	-0.7	261	18.1	17.9	2.8	250	18.9	17.7	6.5	194	2.1	0.5	2.0			
23	16	4.4	-1.2	-4.2	30	3.0	-1.5	-2.6	338	0.5	0.2	-0.5	266	6.5	6.5	0.5	264	15.9	15.8	1.6	245	20.5	18.5	8.8	231	6.9	5.4	4.3			
24	10	4.2	-0.7	-4.1	32	4.4	-2.3	-3.7	328	2.5	1.3	-2.1	301	6.6	5.6	-3.4	273	13.4	13.4	-0.7	244	19.0	17.1	8.3	241	7.6	6.6	3.7			
25	21	2.5	-0.9	-2.3	31	3.3	-1.7	-2.8	332	1.7	0.8	-1.5	290	6.5	6.1	-2.2	276	15.4	15.3	-1.5	256	17.6	17.1	4.2	283	6.7	6.5	-1.5			
26	27	1.1	-0.5	-1.0	24	2.7	-1.1	-2.5	332	1.7	0.8	-1.5	296	6.0	5.4	-2.6	274	14.4	14.4	-1.0	254	19.1	18.3	5.4	256	4.5	4.4	1.1			
27	12	3.3	-0.7	-3.2	23	2.8	-1.1	-2.6	360	1.8	0.0	-1.8	289	5.6	5.3	-1.8	266	12.9	12.9	1.0	256	19.8	19.2	4.9	256	7.1	6.9	1.7			
28	26	3.4	-1.5	-3.1	28	3.0	-1.4	-2.6	328	3.2	1.7	-2.7	287	8.9	8.5	-2.6	264	15.4	15.3	1.5	246	18.8	17.2	7.7	232	5.7	4.5	3.5			
29	19	2.8	-0.9	-2.6	18	2.9	-0.9	-2.8	336	3.9	1.6	-3.6	290	9.2	8.7	-3.1	261	16.0	15.8	2.6	246	22.3	20.4	9.1	247	5.6	5.1	2.2			
30	20	3.8	-1.3	-3.6	6	2.7	-0.3	-2.7	330	2.4	1.2	-2.1	307	5.8	4.6	-3.5	270	14.8	14.8	0.1	244	20.3	18.3	8.8	243	10.2	9.1	4.7			

Daily Normals of Upper Air Winds (1971-2000)

168

JAGDALPUR

DECEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	12	1.9	-0.4	-1.9	24	2.4	-1.0	-2.2	335	3.1	1.3	-2.8	291	7.4	6.9	-2.7	273	16.1	16.1	-0.8	253	22.0	21.1	6.3	229	5.2	3.9	3.4			
2	29	3.3	-1.6	-2.9	32	2.5	-1.3	-2.1	350	1.1	0.2	-1.1	281	6.1	6.0	-1.2	266	14.4	14.4	1.0	248	17.6	16.4	6.5	275	9.5	9.5	-0.8			
3	18	2.5	-0.8	-2.4	33	2.7	-1.5	-2.3	342	1.3	0.4	-1.2	298	5.1	4.5	-2.4	268	11.5	11.5	0.4	244	17.3	15.6	7.5	258	4.2	4.1	0.9			
4	347	3.2	0.7	-3.1	22	2.4	-0.9	-2.2	346	2.1	0.5	-2.0	304	6.3	5.2	-3.5	274	14.5	14.5	-1.1	254	21.0	20.2	5.8	273	6.9	6.9	-0.4			
5	23	3.6	-1.4	-3.3	13	2.7	-0.6	-2.6	342	2.2	0.7	-2.1	287	4.7	4.5	-1.4	263	13.3	13.2	1.6	250	16.0	15.0	5.5	262	7.5	7.4	1.0			
6	32	3.2	-1.7	-2.7	38	3.3	-2.0	-2.6	9	2.0	-0.3	-2.0	295	5.6	5.1	-2.4	262	13.9	13.8	1.9	259	16.8	16.5	3.1	234	6.2	5.0	3.6			
7	18	4.3	-1.3	-4.1	32	3.4	-1.8	-2.9	9	2.4	-0.4	-2.4	293	5.0	4.6	-2.0	265	15.4	15.3	1.3	254	20.5	19.7	5.8	264	10.1	10.0	1.1			
8	29	3.1	-1.5	-2.7	30	3.2	-1.6	-2.8	7	2.3	-0.3	-2.3	277	5.4	5.4	-0.7	267	16.7	16.7	0.9	246	23.2	21.1	9.6	270	12.8	12.8	-0.1			
9	22	3.5	-1.3	-3.2	35	2.8	-1.6	-2.3	353	2.6	0.3	-2.6	261	9.1	9.0	1.4	270	16.2	16.2	0.1	257	25.3	24.7	5.5	242	4.3	3.8	2.0			
10	20	3.7	-1.3	-3.5	9	2.4	-0.4	-2.4	335	2.1	0.9	-1.9	286	7.3	7.0	-2.0	271	17.9	17.9	-0.3	255	21.4	20.7	5.4	278	5.6	5.5	-0.8			
11	23	2.8	-1.1	-2.6	12	1.9	-0.4	-1.9	298	2.1	1.9	-1.0	284	6.8	6.6	-1.7	264	17.3	17.2	1.7	245	20.6	18.6	8.8	258	11.5	11.3	2.3			
12	9	2.6	-0.4	-2.6	360	1.1	0.0	-1.1	311	2.3	1.7	-1.5	295	6.8	6.1	-2.9	266	17.1	17.1	1.1	255	20.0	19.3	5.1	280	6.7	6.6	-1.2			
13	357	1.8	0.1	-1.8	344	0.7	0.2	-0.7	296	2.5	2.3	-1.1	287	6.6	6.3	-1.9	273	16.5	16.5	-0.9	261	17.1	16.9	2.7	21	3.3	-1.2	-3.1			
14	17	3.0	-0.9	-2.9	7	2.6	-0.3	-2.6	312	2.5	1.9	-1.7	290	9.3	8.7	-3.2	268	19.5	19.5	0.7	253	24.4	23.3	7.1	260	11.1	10.9	2.0			
15	21	3.0	-1.1	-2.8	38	1.8	-1.1	-1.4	325	1.6	0.9	-1.3	289	9.0	8.5	-3.0	269	19.5	19.5	0.2	251	19.3	18.2	6.3	354	5.1	0.5	-5.1			
16	36	2.4	-1.4	-1.9	23	2.8	-1.1	-2.6	323	2.6	1.6	-2.1	273	6.4	6.4	-0.3	270	20.1	20.1	-0.1	259	21.3	20.9	3.9	252	11.9	11.3	3.7			
17	19	3.9	-1.3	-3.7	32	2.6	-1.4	-2.2	2	2.8	-0.1	-2.8	275	7.3	7.3	-0.7	267	18.1	18.1	1.1	250	26.0	24.4	9.1	249	5.0	4.7	1.8			
18	21	2.6	-0.9	-2.4	9	1.8	-0.3	-1.8	333	3.1	1.4	-2.8	289	7.6	7.2	-2.5	276	19.5	19.4	-2.2	259	25.4	25.0	4.7	297	11.6	10.4	-5.2			
19	21	2.2	-0.8	-2.1	23	2.1	-0.8	-1.9	339	2.8	1.0	-2.6	279	8.7	8.6	-1.4	274	17.0	17.0	-1.1	258	24.9	24.4	5.0	268	6.9	6.9	0.3			
20	12	2.5	-0.5	-2.4	6	1.9	-0.2	-1.9	333	1.3	0.6	-1.2	292	8.8	8.2	-3.3	271	19.8	19.8	-0.3	260	23.3	22.9	4.2	279	13.9	13.7	-2.1			
21	18	2.2	-0.7	-2.1	11	2.0	-0.4	-2.0	322	3.3	2.0	-2.6	298	7.8	6.9	-3.7	276	18.1	18.0	-2.0	263	24.0	23.8	2.8	258	8.9	8.7	1.9			
22	34	1.1	-0.6	-0.9	4	1.6	-0.1	-1.6	343	3.1	0.9	-3.0	300	10.3	8.9	-5.1	281	21.2	20.8	-4.2	267	26.8	26.8	1.3	279	7.7	7.6	-1.2			
23	32	1.5	-0.8	-1.3	342	0.6	0.2	-0.6	311	4.4	3.3	-2.9	286	10.1	9.7	-2.8	269	20.6	20.6	0.4	259	20.8	20.5	3.8	266	10.5	10.5	0.7			
24	344	1.8	0.5	-1.7	346	1.2	0.3	-1.2	283	4.0	3.9	-0.9	278	13.4	13.3	-1.8	265	22.6	22.5	1.8	250	26.9	25.3	9.1	255	14.0	13.5	3.6			
25	33	1.7	-0.9	-1.4	29	1.3	-0.6	-1.1	304	3.4	2.8	-1.9	287	11.2	10.7	-3.2	272	22.9	22.9	-0.8	250	30.4	28.5	10.5	242	9.8	8.7	4.6			
26	13	1.7	-0.4	-1.7	17	1.7	-0.5	-1.6	309	2.2	1.7	-1.4	285	10.3	10.0	-2.6	275	21.0	20.9	-1.7	264	20.1	20.0	2.0	271	12.0	12.0	-0.3			
27	27	0.7	-0.3	-0.6	360	1.5	0.0	-1.5	261	2.0	2.0	0.3	272	10.0	10.0	-0.3	274	21.8	21.7	-1.6	255	26.8	25.9	6.9	265	14.5	14.5	1.2			
28	3	1.9	-0.1	-1.9	339	1.7	0.6	-1.6	280	3.9	3.8	-0.7	283	10.8	10.5	-2.4	275	22.1	22.0	-2.0	260	24.7	24.3	4.3	274	7.5	7.5	-0.5			
29	20	2.3	-0.8	-2.2	357	1.9	0.1	-1.9	298	4.2	3.7	-2.0	271	10.9	10.9	-0.1	280	21.4	21.1	-3.6	265	26.0	25.9	2.4	295	8.1	7.4	-3.4			
30	315	0.6	0.4	-0.4	320	1.7	1.1	-1.3	315	4.4	3.1	-3.1	283	11.6	11.3	-2.7	281	22.5	22.1	-4.1	262	23.9	23.7	3.2	253	9.5	9.1	2.7			
31	21	0.9	-0.3	-0.8	3	1.8	-0.1	-1.8	312	4.2	3.1	-2.8	283	12.1	11.8	-2.8	281	25.6	25.2	-4.7	275	35.5	35.4	-2.9	301	2.1	1.8	-1.1			

Daily Normals of Upper Air Winds (1971-2000)

JODHPUR

JANUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	73	1.7	-1.6	-0.5	329	1.2	0.6	-1.0	281	8.6	8.5	-1.6	277	20.3	20.1	-2.5	271	42.6	42.6	-0.6	267	48.9	48.8	2.6	268	38.8	38.8	1.2			
2	37	0.5	-0.3	-0.4	330	1.6	0.8	-1.4	287	8.1	7.7	-2.4	277	20.6	20.4	-2.6	275	39.8	39.6	-3.6	270	48.7	48.7	-0.3	278	36.5	36.1	-5.2			
3	29	2.3	-1.1	-2.0	324	1.7	1.0	-1.4	278	8.5	8.4	-1.2	271	20.1	20.1	-0.5	271	36.5	36.5	-0.9	274	44.9	44.8	-3.5	272	33.5	33.5	-0.9			
4	27	0.7	-0.3	-0.6	326	1.1	0.6	-0.9	268	8.1	8.1	0.3	271	20.5	20.5	-0.2	266	38.4	38.3	2.8	267	42.8	42.8	2.0	260	31.6	31.1	5.6			
5	315	0.8	0.6	-0.6	273	2.0	2.0	-0.1	280	8.7	8.6	-1.5	274	21.1	21.0	-1.6	272	36.9	36.9	-1.4	272	45.4	45.4	-1.9	279	29.8	29.4	-4.7			
6	309	1.4	1.1	-0.9	306	1.4	1.1	-0.8	268	9.4	9.4	0.3	271	19.1	19.1	-0.2	266	42.0	41.9	2.6	266	49.0	48.9	3.6	271	30.5	30.5	-0.4			
7	251	1.8	1.7	0.6	297	1.3	1.2	-0.6	272	7.4	7.4	-0.3	268	19.3	19.3	0.8	265	40.1	40.0	3.2	267	48.2	48.1	2.4	261	32.3	31.9	4.8			
8	337	0.8	0.3	-0.7	352	0.7	0.1	-0.7	278	7.5	7.4	-1.1	276	19.0	18.9	-1.9	274	34.8	34.7	-2.6	260	38.8	38.2	6.8	278	27.2	27.0	-3.6			
9	339	1.4	0.5	-1.3	315	1.1	0.8	-0.8	278	8.4	8.3	-1.2	275	21.2	21.1	-1.9	273	42.4	42.3	-2.5	270	49.5	49.5	0.0	276	31.7	31.5	-3.2			
10	315	0.8	0.6	-0.6	300	0.8	0.7	-0.4	268	8.6	8.6	0.3	269	22.5	22.5	0.3	266	37.6	37.5	2.7	258	43.1	42.2	8.8	263	24.4	24.2	3.1			
11	302	2.8	2.4	-1.5	289	2.4	2.3	-0.8	269	9.8	9.8	0.1	273	24.1	24.1	-1.4	271	45.4	45.4	-1.0	265	46.4	46.2	4.4	272	39.3	39.3	-1.6			
12	299	1.8	1.6	-0.9	295	1.7	1.5	-0.7	269	8.5	8.5	0.1	274	22.8	22.8	-1.5	278	39.1	38.7	-5.4	272	48.3	48.3	-1.4	268	36.8	36.8	1.2			
13	333	0.7	0.3	-0.6	309	1.4	1.1	-0.9	272	10.4	10.4	-0.4	276	26.5	26.3	-2.9	271	44.0	44.0	-1.0	272	49.9	49.9	-2.1	268	35.0	35.0	1.0			
14	360	0.8	0.0	-0.8	301	1.7	1.5	-0.9	269	10.8	10.8	0.1	273	25.8	25.8	-1.4	272	45.0	45.0	-1.3	272	51.6	51.6	-1.4	268	35.1	35.1	1.3			
15	306	1.9	1.5	-1.1	292	1.8	1.7	-0.7	273	11.2	11.2	-0.6	274	23.7	23.6	-1.6	270	42.6	42.6	0.3	268	51.8	51.8	1.6	281	39.3	38.6	-7.5			
16	357	1.7	0.1	-1.7	347	1.7	0.4	-1.7	281	9.1	8.9	-1.8	277	24.5	24.3	-2.9	271	46.7	46.7	-1.2	271	50.0	50.0	-1.0	273	32.8	32.8	-1.8			
17	55	3.8	-3.1	-2.2	352	1.5	0.2	-1.5	277	8.6	8.5	-1.1	274	21.0	20.9	-1.6	272	41.4	41.4	-1.5	271	50.5	50.5	-1.3	270	35.3	35.3	-0.1			
18	27	1.6	-0.7	-1.4	306	1.7	1.4	-1.0	268	10.0	10.0	0.4	270	21.0	21.0	-0.1	271	42.8	42.8	-1.0	268	48.8	48.8	1.6	274	34.9	34.8	-2.5			
19	322	1.6	1.0	-1.3	294	1.7	1.6	-0.7	276	10.1	10.0	-1.1	275	23.2	23.1	-2.0	276	42.7	42.5	-4.2	270	53.4	53.4	-0.1	272	30.4	30.4	-1.1			
20	267	3.9	3.9	0.2	285	1.6	1.5	-0.4	276	9.0	8.9	-1.0	273	24.8	24.8	-1.3	267	38.4	38.3	2.1	271	45.7	45.7	-0.5	266	29.0	28.9	1.8			
21	299	1.3	1.1	-0.6	277	1.7	1.7	-0.2	269	9.4	9.4	0.2	276	23.9	23.8	-2.5	276	40.5	40.3	-4.4	271	46.3	46.3	-1.2	269	28.0	28.0	0.7			
22	24	1.2	-0.5	-1.1	318	1.3	0.9	-1.0	276	9.8	9.7	-1.1	276	23.2	23.1	-2.4	275	41.5	41.3	-3.8	270	45.7	45.7	-0.1	272	27.7	27.7	-1.0			
23	52	1.1	-0.9	-0.7	287	1.0	1.0	-0.3	267	9.5	9.5	0.5	273	22.1	22.1	-1.1	268	39.0	39.0	1.2	266	46.3	46.2	3.5	258	23.9	23.4	5.0			
24	300	0.8	0.7	-0.4	253	1.7	1.6	0.5	270	10.5	10.5	0.0	270	23.1	23.1	-0.1	271	41.9	41.9	-0.5	267	45.1	45.0	2.2	266	29.3	29.2	2.0			
25	8	1.5	-0.2	-1.5	286	2.6	2.5	-0.7	266	9.9	9.9	0.7	270	23.1	23.1	0.0	267	41.2	41.2	2.0	270	48.5	48.5	0.4	266	29.7	29.6	2.0			
26	327	2.4	1.3	-2.0	284	3.0	2.9	-0.7	267	8.6	8.6	0.5	266	23.6	23.5	1.6	270	45.3	45.3	0.3	264	49.8	49.5	5.0	265	30.3	30.2	2.7			
27	337	2.1	0.8	-1.9	278	2.1	2.1	-0.3	267	10.4	10.4	0.6	270	23.4	23.4	-0.2	268	40.4	40.4	1.1	265	48.2	48.0	4.4	269	35.5	35.5	0.4			
28	343	2.7	0.8	-2.6	323	2.5	1.5	-2.0	277	10.2	10.1	-1.2	275	24.2	24.1	-2.1	277	41.3	41.0	-5.2	273	46.8	46.7	-2.5	268	31.3	31.3	1.1			
29	347	2.3	0.5	-2.2	307	1.5	1.2	-0.9	274	10.0	10.0	-0.7	276	22.5	22.4	-2.2	271	39.4	39.4	-0.5	273	42.3	42.2	-2.2	270	28.7	28.7	0.0			
30	303	2.0	1.7	-1.1	273	2.0	2.0	-0.1	264	10.7	10.6	1.1	274	24.3	24.3	-1.5	268	43.3	43.3	1.5	272	42.4	42.4	-1.2	269	32.8	32.8	0.4			
31	353	1.6	0.2	-1.6	318	1.5	1.0	-1.1	281	9.7	9.5	-1.9	272	24.1	24.1	-1.0	275	44.4	44.2	-4.1	270	44.5	44.5	-0.1	284	28.6	27.8	-6.8			

Daily Normals of Upper Air Winds (1971-2000)

JODHPUR

FEBRUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	259	1.0	1.0	0.2	308	1.6	1.3	-1.0	277	10.4	10.3	-1.2	276	24.4	24.3	-2.7	273	42.7	42.7	-2.0	270	49.9	49.9	-0.2	274	32.7	32.6	-2.1
2	18	0.6	-0.2	-0.6	306	1.4	1.1	-0.8	267	9.1	9.1	0.5	268	21.3	21.3	0.8	275	40.7	40.5	-3.7	274	47.4	47.3	-2.9	273	30.3	30.3	-1.5
3	42	2.8	-1.9	-2.1	326	1.1	0.6	-0.9	280	9.7	9.5	-1.7	280	20.6	20.3	-3.7	280	38.7	38.1	-6.7	276	44.0	43.8	-4.5	276	29.1	29.0	-2.8
4	270	1.0	1.0	0.0	299	2.1	1.8	-1.0	276	10.0	10.0	-1.0	273	21.5	21.5	-1.0	274	42.0	41.9	-2.7	272	47.4	47.4	-1.6	272	30.4	30.4	-0.8
5	330	0.8	0.4	-0.7	313	1.9	1.4	-1.3	287	7.9	7.6	-2.3	282	20.4	19.9	-4.3	276	39.0	38.8	-4.2	274	43.6	43.5	-3.1	275	30.9	30.8	-2.8
6	333	0.9	0.4	-0.8	261	2.0	2.0	0.3	274	8.8	8.8	-0.6	278	19.8	19.6	-2.9	278	34.7	34.4	-4.7	268	45.8	45.8	1.8	273	28.7	28.7	-1.4
7	269	4.1	4.1	0.1	250	2.7	2.5	0.9	269	8.7	8.7	0.1	271	23.0	23.0	-0.6	274	40.0	39.9	-2.5	267	46.6	46.6	2.1	272	32.4	32.4	-0.9
8	334	3.9	1.7	-3.5	320	2.5	1.6	-1.9	281	8.7	8.5	-1.7	281	22.8	22.4	-4.2	274	41.1	41.0	-3.2	280	49.9	49.2	-8.6	271	35.5	35.5	-0.8
9	12	1.4	-0.3	-1.4	311	1.8	1.4	-1.2	280	8.4	8.3	-1.4	280	20.4	20.1	-3.4	274	38.6	38.5	-3.0	277	48.7	48.4	-5.6	272	34.4	34.4	-1.4
10	261	2.0	2.0	0.3	274	2.8	2.8	-0.2	271	8.9	8.9	-0.1	278	19.7	19.5	-2.6	280	39.7	39.0	-7.2	280	48.5	47.8	-8.3	275	35.9	35.8	-3.1
11	247	4.4	4.1	1.7	315	1.6	1.1	-1.1	276	7.7	7.7	-0.8	274	20.8	20.7	-1.5	268	37.1	37.1	1.3	275	45.9	45.7	-4.3	270	30.6	30.6	-0.1
12	280	5.1	5.0	-0.9	279	1.8	1.8	-0.3	263	9.2	9.1	1.1	267	20.7	20.7	1.0	271	39.7	39.7	-1.0	269	47.4	47.4	0.6	272	35.2	35.2	-1.1
13	257	2.6	2.5	0.6	247	2.6	2.4	1.0	262	8.9	8.8	1.3	269	20.9	20.9	0.5	270	39.2	39.2	-0.3	268	39.8	39.8	1.4	270	28.8	28.8	-0.2
14	272	3.2	3.2	-0.1	252	3.5	3.3	1.1	266	9.2	9.2	0.6	269	21.7	21.7	0.5	264	38.2	38.0	3.7	262	43.0	42.5	6.3	261	27.5	27.2	4.1
15	283	2.8	2.7	-0.6	294	1.7	1.6	-0.7	267	8.9	8.9	0.4	269	21.8	21.8	0.2	264	38.7	38.5	3.8	263	44.4	44.0	5.6	265	26.4	26.3	2.4
16	239	2.7	2.3	1.4	249	2.6	2.4	0.9	259	9.4	9.2	1.8	267	24.2	24.2	1.2	265	42.6	42.5	3.5	262	46.9	46.4	6.6	272	26.2	26.2	-0.7
17	263	2.5	2.5	0.3	240	2.4	2.1	1.2	258	8.5	8.3	1.7	264	21.2	21.1	2.2	266	44.6	44.5	2.8	267	47.3	47.2	2.8	268	30.1	30.1	1.3
18	281	4.9	4.8	-0.9	292	2.2	2.0	-0.8	267	7.3	7.3	0.4	270	21.0	21.0	0.0	269	40.1	40.1	0.6	267	45.2	45.2	2.0	267	32.5	32.5	1.5
19	320	1.6	1.0	-1.2	264	0.9	0.9	0.1	266	9.1	9.1	0.6	269	20.7	20.7	0.4	267	42.7	42.6	2.3	261	46.4	45.9	7.1	268	29.8	29.8	0.9
20	287	3.8	3.6	-1.1	278	2.7	2.7	-0.4	271	8.5	8.5	-0.2	275	20.0	19.9	-1.7	274	39.9	39.8	-3.1	269	42.4	42.4	0.8	286	31.0	29.8	-8.5
21	305	2.1	1.7	-1.2	286	2.6	2.5	-0.7	271	8.0	8.0	-0.1	275	21.3	21.2	-1.9	274	39.6	39.5	-2.9	271	46.8	46.8	-0.5	272	27.9	27.9	-0.9
22	263	1.7	1.7	0.2	277	1.7	1.7	-0.2	268	8.7	8.7	0.3	277	21.7	21.6	-2.5	268	37.4	37.4	1.2	265	43.2	43.1	3.4	269	29.2	29.2	0.5
23	256	3.4	3.3	0.8	253	3.4	3.3	1.0	271	8.5	8.5	-0.1	274	19.6	19.6	-1.2	276	38.8	38.6	-4.1	276	40.3	40.1	-4.1	268	28.1	28.1	1.0
24	249	6.0	5.6	2.2	258	4.3	4.2	0.9	265	10.7	10.7	0.9	275	18.9	18.8	-1.6	277	36.7	36.5	-4.2	265	39.8	39.6	3.7	269	28.2	28.2	0.3
25	291	3.9	3.6	-1.4	274	2.8	2.8	-0.2	268	10.1	10.1	0.4	272	21.9	21.9	-0.7	270	37.6	37.6	0.2	274	42.0	41.9	-3.2	275	25.9	25.8	-2.3
26	278	2.2	2.2	-0.3	253	3.0	2.9	0.9	266	9.4	9.4	0.6	275	19.7	19.6	-1.8	271	37.5	37.5	-0.9	271	41.7	41.7	-0.5	270	25.6	25.6	-0.2
27	266	1.6	1.6	0.1	253	3.4	3.3	1.0	263	9.5	9.4	1.2	271	22.8	22.8	-0.2	271	37.9	37.9	-0.4	267	45.3	45.3	2.1	270	28.1	28.1	0.2
28	294	1.7	1.6	-0.7	292	2.7	2.5	-1.0	270	8.7	8.7	0.0	271	22.9	22.9	-0.2	270	40.8	40.8	0.3	271	48.9	48.9	-1.2	260	29.6	29.2	5.1
29	236	3.2	2.7	1.8	291	2.6	2.4	-0.9	280	8.2	8.1	-1.5	266	20.4	20.4	1.3	256	29.0	28.1	7.1	248	28.4	26.4	10.5	250	26.5	24.9	9.1

Daily Normals of Upper Air Winds (1971-2000)

171

JODHPUR

MARCH

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	298	1.9	1.7	-0.9	285	2.8	2.7	-0.7	273	9.4	9.4	-0.5	275	20.3	20.2	-1.9	275	35.1	35.0	-3.2	275	40.5	40.4	-3.2	264	26.7	26.6	2.7			
2	351	1.9	0.3	-1.9	300	2.4	2.1	-1.2	282	6.7	6.6	-1.4	275	18.0	17.9	-1.5	271	33.6	33.6	-0.6	270	43.8	43.8	0.1	261	27.0	26.7	4.2			
3	239	1.7	1.5	0.9	245	1.7	1.5	0.7	260	6.7	6.6	1.2	271	18.2	18.2	-0.3	277	32.9	32.7	-3.8	269	39.1	39.1	0.7	254	24.6	23.7	6.6			
4	307	2.0	1.6	-1.2	261	3.9	3.9	0.6	269	8.6	8.6	0.2	272	21.0	21.0	-0.8	276	33.3	33.1	-3.6	273	37.2	37.2	-1.8	277	21.6	21.5	-2.5			
5	273	3.3	3.3	-0.2	268	3.7	3.7	0.1	267	9.1	9.1	0.4	271	22.1	22.1	-0.3	271	34.3	34.3	-0.4	268	44.2	44.2	1.7	257	36.3	35.3	8.3			
6	287	3.0	2.9	-0.9	293	2.6	2.4	-1.0	269	7.9	7.9	0.2	270	18.2	18.2	0.0	276	30.3	30.1	-3.3	270	40.9	40.9	-0.3	266	21.3	21.2	1.6			
7	279	3.6	3.6	-0.6	282	1.9	1.9	-0.4	257	7.6	7.4	1.7	266	19.6	19.5	1.5	266	33.2	33.1	2.6	265	43.9	43.7	4.1	269	31.7	31.7	0.6			
8	264	2.8	2.8	0.3	256	3.2	3.1	0.8	262	8.6	8.5	1.2	271	20.8	20.8	-0.3	269	35.7	35.7	0.7	267	44.2	44.1	2.2	259	25.1	24.6	4.8			
9	266	4.5	4.5	0.3	261	3.7	3.7	0.6	268	7.5	7.5	0.3	266	18.1	18.1	1.3	266	30.6	30.5	2.1	263	41.7	41.3	5.4	262	26.5	26.2	3.7			
10	257	4.0	3.9	0.9	256	4.5	4.4	1.1	263	8.2	8.1	1.0	264	20.1	20.0	2.2	268	37.0	37.0	1.0	262	45.8	45.3	6.7	269	28.3	28.3	0.4			
11	249	6.4	6.0	2.3	262	5.2	5.2	0.7	272	8.1	8.1	-0.3	271	18.2	18.2	-0.3	268	35.4	35.4	1.5	271	39.9	39.9	-0.8	273	31.4	31.4	-1.5			
12	281	3.3	3.2	-0.6	263	2.4	2.4	0.3	265	7.3	7.3	0.6	271	19.4	19.4	-0.5	277	32.8	32.6	-4.0	269	43.7	43.7	0.6	271	24.7	24.7	-0.6			
13	293	3.0	2.8	-1.2	281	2.5	2.5	-0.5	274	7.2	7.2	-0.5	274	16.8	16.8	-1.1	275	30.1	30.0	-2.6	275	40.4	40.2	-3.5	268	18.9	18.9	0.7			
14	283	1.3	1.3	-0.3	272	3.1	3.1	-0.1	276	7.1	7.1	-0.7	278	18.1	17.9	-2.4	278	31.5	31.2	-4.6	276	39.7	39.5	-3.9	273	23.3	23.3	-1.4			
15	269	3.9	3.9	0.1	255	4.7	4.5	1.2	271	7.6	7.6	-0.1	267	18.2	18.2	1.1	269	34.9	34.9	0.5	266	35.1	35.0	2.7	271	22.6	22.6	-0.2			
16	243	3.1	2.8	1.4	264	3.8	3.8	0.4	265	7.8	7.8	0.7	270	19.3	19.3	0.0	272	28.2	28.2	-1.2	266	36.3	36.2	2.3	277	25.0	24.8	-3.2			
17	250	5.9	5.6	2.0	259	4.1	4.0	0.8	262	7.7	7.6	1.1	263	18.5	18.4	2.2	272	30.7	30.7	-0.9	266	39.8	39.7	3.0	277	18.7	18.6	-2.2			
18	268	6.5	6.5	0.2	271	4.7	4.7	-0.1	272	8.5	8.5	-0.3	266	17.6	17.6	1.3	269	29.2	29.2	0.6	265	34.7	34.6	2.8	266	17.6	17.6	1.3			
19	277	3.8	3.8	-0.5	273	3.9	3.9	-0.2	268	7.1	7.1	0.2	269	18.3	18.3	0.2	269	31.7	31.7	0.5	267	34.7	34.7	1.7	271	23.3	23.3	-0.6			
20	267	4.4	4.4	0.2	252	4.7	4.5	1.5	262	7.3	7.2	1.0	264	16.9	16.8	1.8	263	31.3	31.1	3.8	264	36.9	36.7	3.6	276	24.4	24.3	-2.4			
21	288	3.8	3.6	-1.2	260	4.8	4.7	0.8	269	8.2	8.2	0.1	275	17.1	17.0	-1.5	277	26.3	26.1	-3.1	270	32.2	32.2	0.1	289	19.4	18.4	-6.3			
22	305	3.8	3.1	-2.2	268	3.7	3.7	0.1	259	8.1	8.0	1.5	268	17.2	17.2	0.5	277	29.5	29.3	-3.6	277	36.0	35.7	-4.4	270	18.2	18.2	0.1			
23	258	4.9	4.8	1.0	267	4.1	4.1	0.2	272	7.7	7.7	-0.3	273	18.7	18.7	-0.9	276	27.7	27.6	-2.7	273	31.8	31.8	-1.4	268	16.5	16.5	0.6			
24	270	4.4	4.4	0.0	261	4.3	4.2	0.7	264	6.7	6.7	0.7	271	15.3	15.3	-0.3	270	26.1	26.1	-0.1	274	31.8	31.7	-2.0	263	19.0	18.9	2.3			
25	274	5.6	5.6	-0.4	271	4.3	4.3	-0.1	275	5.6	5.6	-0.5	281	14.5	14.2	-2.8	285	25.6	24.8	-6.5	276	31.1	30.9	-3.2	286	23.4	22.4	-6.6			
26	285	3.9	3.8	-1.0	265	3.6	3.6	0.3	271	6.2	6.2	-0.1	282	15.4	15.1	-3.2	280	25.3	24.9	-4.2	277	32.1	31.8	-4.0	271	16.5	16.5	-0.4			
27	290	3.0	2.8	-1.0	273	3.4	3.4	-0.2	270	6.2	6.2	0.0	276	15.1	15.0	-1.6	281	23.6	23.2	-4.3	272	32.3	32.3	-1.3	268	23.4	23.4	0.7			
28	254	3.7	3.6	1.0	258	5.3	5.2	1.1	263	7.0	6.9	0.9	272	15.7	15.7	-0.5	275	28.2	28.1	-2.3	272	31.0	31.0	-1.2	259	21.2	20.8	3.9			
29	261	4.4	4.3	0.7	270	4.5	4.5	0.0	265	6.2	6.2	0.5	263	15.4	15.3	1.8	260	29.1	28.7	5.1	261	35.1	34.6	5.6	262	23.8	23.6	3.4			
30	266	3.0	3.0	0.2	278	3.7	3.7	-0.5	265	6.0	6.0	0.5	266	14.2	14.2	1.1	269	25.1	25.1	0.3	267	32.3	32.3	1.7	258	18.9	18.5	3.8			
31	256	3.2	3.1	0.8	261	4.7	4.6	0.7	261	6.5	6.4	1.0	267	15.1	15.1	0.9	274	24.1	24.0	-1.7	269	29.9	29.9	0.7	272	20.1	20.1	-0.7			

Daily Normals of Upper Air Winds (1971-2000)

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JODHPUR

APRIL

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	280	3.9	3.8	-0.7	266	4.5	4.5	0.3	260	5.8	5.7	1.0	268	14.2	14.2	0.6	267	27.1	27.1	1.4	263	33.2	33.0	4.0	278	19.9	19.7	-2.9			
2	287	2.7	2.6	-0.8	259	3.6	3.5	0.7	256	6.0	5.8	1.4	263	14.5	14.4	1.8	271	25.0	25.0	-0.5	269	37.0	37.0	0.5	268	19.9	19.9	0.7			
3	248	3.2	3.0	1.2	252	4.3	4.1	1.3	250	5.9	5.6	2.0	268	15.3	15.3	0.6	265	23.8	23.7	2.0	262	33.0	32.7	4.7	259	23.1	22.7	4.5			
4	286	4.5	4.3	-1.2	262	5.1	5.1	0.7	264	6.3	6.3	0.7	266	14.7	14.7	0.9	266	25.5	25.4	1.6	262	35.3	35.0	4.8	265	23.4	23.3	2.1			
5	253	4.2	4.0	1.2	248	4.0	3.7	1.5	257	5.8	5.7	1.3	260	13.8	13.6	2.3	275	24.6	24.5	-2.3	274	36.2	36.1	-2.7	264	21.6	21.5	2.2			
6	262	3.6	3.6	0.5	275	3.3	3.3	-0.3	269	4.8	4.8	0.1	266	14.1	14.1	0.9	265	26.4	26.3	2.5	261	33.6	33.1	5.5	261	24.1	23.8	3.6			
7	262	6.9	6.8	1.0	268	4.7	4.7	0.2	259	6.6	6.5	1.3	272	16.3	16.3	-0.6	270	27.9	27.9	-0.2	264	34.9	34.7	3.8	255	20.2	19.5	5.1			
8	280	4.2	4.1	-0.7	271	4.7	4.7	-0.1	274	5.5	5.5	-0.4	274	15.6	15.6	-1.0	281	29.6	29.1	-5.5	266	37.1	37.0	2.8	260	20.5	20.2	3.4			
9	261	5.6	5.5	0.9	255	5.1	4.9	1.3	258	6.2	6.1	1.3	278	13.9	13.8	-2.0	281	24.6	24.1	-4.8	273	31.7	31.7	-1.6	264	17.7	17.6	1.7			
10	255	4.8	4.6	1.2	267	3.7	3.7	0.2	267	3.7	3.7	0.2	270	15.4	15.4	0.0	280	27.8	27.3	-5.0	275	32.9	32.8	-3.0	264	12.7	12.6	1.3			
11	262	3.7	3.7	0.5	265	3.7	3.7	0.3	265	4.8	4.8	0.4	269	13.8	13.8	0.3	276	28.5	28.4	-2.8	276	34.8	34.6	-3.6	277	13.6	13.5	-1.7			
12	265	2.3	2.3	0.2	254	4.7	4.5	1.3	260	5.5	5.4	1.0	269	14.2	14.2	0.2	275	28.6	28.5	-2.7	271	30.9	30.9	-0.3	259	15.2	14.9	2.8			
13	249	4.2	3.9	1.5	253	6.1	5.8	1.8	253	5.9	5.7	1.7	267	14.3	14.3	0.8	264	26.1	26.0	2.7	266	31.6	31.5	2.1	276	20.9	20.8	-2.1			
14	275	5.5	5.5	-0.5	256	5.3	5.1	1.3	260	6.9	6.8	1.2	273	14.5	14.5	-0.8	272	21.9	21.9	-0.9	268	30.4	30.4	1.1	271	15.7	15.7	-0.3			
15	294	3.0	2.7	-1.2	269	4.1	4.1	0.1	274	3.9	3.9	-0.3	273	11.0	11.0	-0.6	272	19.7	19.7	-0.7	266	27.0	26.9	1.8	270	23.6	23.6	-0.1			
16	306	3.4	2.8	-2.0	268	6.4	6.4	0.2	280	5.2	5.1	-0.9	280	11.7	11.5	-2.0	278	23.5	23.3	-3.3	269	28.1	28.1	0.5	267	16.2	16.2	0.9			
17	275	3.2	3.2	-0.3	256	3.8	3.7	0.9	270	5.2	5.2	0.0	276	13.4	13.3	-1.4	277	22.4	22.2	-2.7	280	27.1	26.7	-4.7	274	10.4	10.4	-0.8			
18	235	2.8	2.3	1.6	248	4.2	3.9	1.6	266	4.4	4.4	0.3	277	11.9	11.8	-1.4	277	24.0	23.8	-2.9	271	28.3	28.3	-0.3	270	18.1	18.1	0.1			
19	230	4.2	3.2	2.7	256	3.7	3.6	0.9	273	4.2	4.2	-0.2	270	10.6	10.6	0.0	276	21.5	21.4	-2.3	273	26.1	26.1	-1.5	258	10.7	10.4	2.3			
20	245	5.9	5.3	2.5	240	5.6	4.9	2.8	253	4.9	4.7	1.4	267	11.1	11.1	0.6	272	22.3	22.3	-0.9	265	27.9	27.8	2.2	259	16.3	16.0	3.0			
21	236	4.8	4.0	2.7	245	4.7	4.3	2.0	255	5.7	5.5	1.5	268	11.0	11.0	0.3	261	22.7	22.4	3.5	262	27.0	26.7	3.9	257	15.3	14.9	3.4			
22	253	5.4	5.2	1.6	252	5.4	5.1	1.7	268	5.9	5.9	0.2	288	10.5	10.0	-3.3	277	19.1	19.0	-2.2	262	26.6	26.3	3.7	266	10.3	10.3	0.8			
23	274	4.8	4.8	-0.3	259	4.9	4.8	0.9	278	4.3	4.3	-0.6	284	8.1	7.8	-2.0	276	14.6	14.5	-1.4	266	25.5	25.4	1.6	272	16.2	16.2	-0.6			
24	262	5.1	5.1	0.7	251	4.6	4.4	1.5	266	4.0	4.0	0.3	290	9.0	8.5	-3.1	283	15.5	15.1	-3.4	274	21.3	21.3	-1.4	266	10.0	10.0	0.7			
25	248	5.3	4.9	2.0	247	6.1	5.6	2.4	260	4.1	4.0	0.7	287	8.7	8.3	-2.5	287	18.5	17.7	-5.5	271	21.1	21.1	-0.3	263	18.1	18.0	2.3			
26	272	5.2	5.2	-0.2	246	5.1	4.7	2.1	261	4.4	4.3	0.7	290	8.0	7.5	-2.8	277	21.0	20.8	-2.6	278	27.3	27.0	-3.8	269	6.8	6.8	0.1			
27	275	3.5	3.5	-0.3	264	5.3	5.3	0.6	270	4.4	4.4	0.0	280	10.9	10.7	-1.8	269	22.6	22.6	0.4	265	26.7	26.6	2.5	281	12.5	12.3	-2.3			
28	252	5.6	5.3	1.7	253	5.5	5.3	1.6	273	5.3	5.3	-0.3	280	11.7	11.5	-2.0	281	21.0	20.6	-3.9	273	28.7	28.7	-1.5	271	14.5	14.5	-0.2			
29	249	7.4	6.9	2.7	247	6.5	6.0	2.5	260	5.6	5.5	1.0	274	10.5	10.5	-0.8	276	19.9	19.8	-2.1	268	23.8	23.8	1.0	272	12.3	12.3	-0.4			
30	264	5.1	5.1	0.5	244	6.6	5.9	2.9	265	5.3	5.3	0.5	274	11.8	11.8	-0.8	275	22.7	22.6	-2.1	267	26.5	26.5	1.5	269	16.9	16.9	0.4			

Daily Normals of Upper Air Winds (1971-2000)

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JODHPUR

MAY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	246	6.6	6.0	2.7	248	6.9	6.4	2.6	260	6.2	6.1	1.1	272	10.9	10.9	-0.4	274	19.8	19.8	-1.4	268	25.7	25.7	0.8	268	8.5	8.5	0.3			
2	246	6.4	5.9	2.6	248	6.1	5.7	2.3	263	6.3	6.2	0.8	280	11.5	11.3	-2.0	278	21.5	21.3	-3.0	279	26.8	26.5	-4.1	256	10.5	10.2	2.6			
3	255	4.8	4.6	1.2	250	7.1	6.7	2.4	263	7.0	6.9	0.9	277	11.7	11.6	-1.4	277	24.6	24.4	-2.8	270	33.0	33.0	0.0	255	8.3	8.0	2.1			
4	256	5.6	5.4	1.3	251	6.1	5.8	2.0	258	5.4	5.3	1.1	279	8.9	8.8	-1.4	271	22.3	22.3	-0.3	259	31.2	30.7	5.8	257	13.0	12.7	3.0			
5	264	4.8	4.8	0.5	248	5.3	4.9	2.0	261	5.5	5.4	0.9	288	8.5	8.1	-2.7	278	18.1	17.9	-2.6	260	23.4	23.0	4.2	238	8.3	7.0	4.4			
6	271	4.6	4.6	-0.1	254	5.5	5.3	1.5	282	4.4	4.3	-0.9	291	8.5	7.9	-3.0	274	17.0	17.0	-1.2	259	27.1	26.6	5.0	254	13.3	12.8	3.7			
7	240	6.1	5.3	3.0	252	5.7	5.4	1.8	274	4.8	4.8	-0.3	286	9.4	9.0	-2.6	273	19.3	19.3	-1.0	275	29.8	29.7	-2.6	269	10.7	10.7	0.1			
8	248	6.2	5.8	2.3	252	6.1	5.8	1.9	262	6.6	6.5	0.9	282	7.9	7.7	-1.7	281	18.7	18.4	-3.6	274	24.5	24.4	-1.8	285	12.3	11.9	-3.1			
9	254	5.2	5.0	1.4	252	4.9	4.7	1.5	271	5.2	5.2	-0.1	282	9.1	8.9	-1.9	286	19.7	18.9	-5.5	275	21.5	21.4	-1.8	274	11.4	11.4	-0.7			
10	253	6.6	6.3	1.9	251	6.0	5.7	2.0	268	5.0	5.0	0.2	293	9.0	8.3	-3.5	298	20.2	17.8	-9.6	276	26.1	25.9	-2.8	283	13.9	13.5	-3.1			
11	274	5.1	5.1	-0.4	243	5.6	5.0	2.5	281	4.1	4.0	-0.8	301	8.4	7.2	-4.3	291	17.0	15.9	-6.1	266	21.3	21.2	1.6	227	7.2	5.3	4.9			
12	229	3.7	2.8	2.4	238	4.6	3.9	2.4	250	2.7	2.5	0.9	290	6.7	6.3	-2.3	283	15.6	15.2	-3.4	272	19.4	19.4	-0.8	268	10.0	10.0	0.3			
13	269	6.1	6.1	0.1	261	6.3	6.2	1.0	272	5.2	5.2	-0.2	290	10.4	9.8	-3.5	282	17.2	16.8	-3.6	273	23.5	23.5	-1.2	257	14.7	14.3	3.3			
14	261	5.6	5.5	0.9	247	6.9	6.4	2.7	258	5.3	5.2	1.1	283	8.5	8.3	-1.9	273	15.8	15.8	-0.7	265	22.0	21.9	1.8	254	7.7	7.4	2.1			
15	246	6.0	5.5	2.4	245	7.1	6.4	3.0	258	3.8	3.7	0.8	281	6.7	6.6	-1.3	266	16.2	16.2	1.1	266	23.3	23.3	1.5	272	8.2	8.2	-0.3			
16	258	6.0	5.9	1.3	248	6.1	5.7	2.3	261	3.8	3.8	0.6	282	7.9	7.7	-1.7	271	15.9	15.9	-0.3	267	23.0	23.0	1.4	257	8.5	8.3	1.9			
17	241	6.6	5.8	3.2	245	5.4	4.9	2.3	272	5.1	5.1	-0.2	298	8.3	7.3	-3.9	281	19.8	19.4	-3.8	275	21.2	21.1	-1.7	249	5.0	4.7	1.8			
18	257	6.9	6.7	1.6	253	6.4	6.1	1.9	276	5.1	5.1	-0.5	303	8.7	7.3	-4.8	284	17.5	17.0	-4.2	270	17.9	17.9	-0.1	245	5.7	5.2	2.4			
19	264	5.1	5.1	0.5	243	6.5	5.8	2.9	261	3.6	3.6	0.6	299	7.9	6.9	-3.8	294	17.1	15.6	-7.0	277	18.3	18.2	-2.1	235	8.0	6.5	4.6			
20	249	5.3	4.9	1.9	252	7.3	6.9	2.3	275	5.7	5.7	-0.5	302	9.7	8.2	-5.2	284	16.2	15.7	-3.9	274	18.2	18.2	-1.2	293	6.9	6.3	-2.7			
21	243	7.1	6.3	3.2	249	7.3	6.8	2.6	274	4.6	4.6	-0.3	305	8.8	7.2	-5.0	275	18.0	17.9	-1.7	269	18.2	18.2	0.3	246	8.5	7.7	3.5			
22	245	8.5	7.7	3.6	243	7.2	6.4	3.2	262	5.3	5.3	0.7	309	8.9	6.9	-5.6	299	16.3	14.3	-7.8	273	17.4	17.4	-1.0	242	4.0	3.5	1.9			
23	249	6.4	6.0	2.3	251	6.8	6.4	2.2	270	4.0	4.0	0.0	311	9.2	7.0	-6.0	289	15.1	14.3	-4.8	272	15.0	15.0	-0.6	280	4.6	4.5	-0.8			
24	270	4.0	4.0	0.0	246	6.6	6.0	2.7	267	3.5	3.5	0.2	308	8.6	6.8	-5.3	283	15.7	15.3	-3.5	281	16.1	15.8	-3.2	266	7.8	7.8	0.5			
25	271	6.2	6.2	-0.1	240	6.9	6.0	3.5	280	4.8	4.7	-0.8	311	7.9	5.9	-5.2	293	10.0	9.2	-3.9	273	12.7	12.7	-0.7	188	2.1	0.3	2.1			
26	265	5.7	5.7	0.5	248	5.7	5.3	2.1	270	4.3	4.3	0.0	305	6.6	5.4	-3.8	280	12.5	12.3	-2.2	271	15.4	15.4	-0.2	301	1.2	1.0	-0.6			
27	240	3.0	2.6	1.5	245	7.5	6.8	3.2	276	4.8	4.8	-0.5	309	8.0	6.2	-5.0	286	13.0	12.5	-3.7	261	14.6	14.4	2.3	284	0.4	0.4	-0.1			
28	246	7.6	6.9	3.1	242	7.2	6.4	3.4	275	3.8	3.8	-0.3	299	8.1	7.1	-3.9	274	14.6	14.6	-1.0	261	15.8	15.6	2.5	239	2.9	2.5	1.5			
29	247	8.6	7.9	3.3	244	7.6	6.8	3.3	274	4.2	4.2	-0.3	313	7.8	5.7	-5.3	271	16.0	16.0	-0.3	258	16.5	16.1	3.5	242	5.9	5.2	2.8			
30	236	8.2	6.8	4.6	235	6.2	5.1	3.6	274	2.7	2.7	-0.2	306	6.2	5.0	-3.6	278	12.7	12.6	-1.7	260	16.1	15.9	2.7	215	4.9	2.8	4.0			
31	247	6.5	6.0	2.5	243	6.1	5.4	2.8	270	3.3	3.3	0.0	286	5.6	5.4	-1.5	278	14.5	14.4	-2.0	258	15.9	15.5	3.4	255	4.8	4.6	1.2			

Daily Normals of Upper Air Winds (1971-2000)

JODHPUR

JUNE

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	261	6.0	5.9	0.9	251	5.4	5.1	1.8	295	2.9	2.6	-1.2	314	6.0	4.3	-4.2	275	11.1	11.1	-1.0	261	15.3	15.1	2.3	157	2.8	-1.1	2.6
2	250	7.5	7.0	2.6	246	6.1	5.6	2.5	280	2.8	2.8	-0.5	322	5.3	3.3	-4.2	289	8.5	8.0	-2.8	267	12.4	12.4	0.7	122	4.4	-3.7	2.3
3	252	6.9	6.6	2.1	246	6.0	5.5	2.4	274	3.0	3.0	-0.2	315	5.7	4.0	-4.0	272	11.1	11.1	-0.4	259	13.1	12.9	2.4	244	3.2	2.9	1.4
4	239	5.0	4.3	2.6	247	5.9	5.4	2.3	300	3.0	2.6	-1.5	322	6.1	3.7	-4.8	279	12.8	12.6	-2.0	266	13.0	13.0	0.8	115	2.6	-2.4	1.1
5	262	3.4	3.4	0.5	242	5.1	4.5	2.4	272	2.4	2.4	-0.1	322	4.9	3.0	-3.9	271	9.5	9.5	-0.2	255	7.6	7.3	2.0	104	2.9	-2.8	0.7
6	255	5.4	5.2	1.4	242	5.5	4.9	2.6	302	2.5	2.1	-1.3	329	5.7	3.0	-4.9	280	8.9	8.8	-1.6	252	10.8	10.2	3.4	88	3.6	-3.6	-0.1
7	261	6.1	6.0	0.9	247	5.6	5.2	2.2	298	2.4	2.1	-1.1	333	5.1	2.3	-4.6	283	9.0	8.8	-2.0	264	6.0	6.0	0.6	45	2.0	-1.4	-1.4
8	252	6.5	6.2	2.0	242	5.2	4.6	2.4	307	1.5	1.2	-0.9	337	4.9	1.9	-4.5	282	9.4	9.2	-1.9	274	7.7	7.7	-0.6	146	2.7	-1.5	2.2
9	240	6.7	5.8	3.3	238	5.7	4.8	3.0	311	2.9	2.2	-1.9	326	4.8	2.7	-4.0	289	7.9	7.5	-2.6	253	5.1	4.9	1.5	82	5.0	-5.0	-0.7
10	254	5.7	5.5	1.6	240	6.6	5.7	3.3	286	2.6	2.5	-0.7	323	5.6	3.4	-4.5	290	6.3	5.9	-2.2	270	4.6	4.6	0.0	95	6.3	-6.3	0.5
11	259	6.6	6.5	1.3	232	5.6	4.4	3.4	279	2.4	2.4	-0.4	287	4.5	4.3	-1.3	261	8.4	8.3	1.3	251	8.2	7.7	2.7	113	1.3	-1.2	0.5
12	249	5.9	5.5	2.1	242	5.3	4.7	2.5	285	2.8	2.7	-0.7	301	4.9	4.2	-2.5	263	7.8	7.7	1.0	273	6.2	6.2	-0.3	79	4.6	-4.5	-0.9
13	240	3.0	2.6	1.5	238	4.9	4.1	2.6	319	0.9	0.6	-0.7	317	4.1	2.8	-3.0	274	5.8	5.8	-0.4	260	6.8	6.7	1.2	90	4.3	-4.3	0.0
14	227	1.6	1.2	1.1	248	3.5	3.3	1.3	315	1.0	0.7	-0.7	307	4.1	3.3	-2.5	292	5.7	5.3	-2.1	275	3.6	3.6	-0.3	63	6.2	-5.5	-2.8
15	280	2.2	2.2	-0.4	245	4.7	4.2	2.0	317	1.9	1.3	-1.4	321	4.3	2.7	-3.3	283	3.7	3.6	-0.8	258	3.9	3.8	0.8	86	6.5	-6.5	-0.5
16	238	4.0	3.4	2.1	250	4.6	4.3	1.6	311	2.1	1.6	-1.4	331	4.3	2.1	-3.8	287	5.0	4.8	-1.5	270	3.5	3.5	0.0	95	6.9	-6.9	0.6
17	260	3.5	3.4	0.6	239	5.2	4.5	2.7	329	2.1	1.1	-1.8	322	4.1	2.5	-3.2	293	5.3	4.9	-2.1	281	1.5	1.5	-0.3	82	5.6	-5.5	-0.8
18	265	3.4	3.4	0.3	236	5.8	4.8	3.2	317	1.6	1.1	-1.2	335	3.3	1.4	-3.0	281	4.6	4.5	-0.9	330	1.6	0.8	-1.4	88	9.2	-9.2	-0.3
19	258	2.5	2.4	0.5	231	5.1	4.0	3.2	321	1.3	0.8	-1.0	334	5.3	2.3	-4.8	350	3.4	0.6	-3.3	326	1.1	0.6	-0.9	96	7.9	-7.9	0.8
20	231	3.6	2.8	2.3	230	5.6	4.3	3.6	14	0.8	-0.2	-0.8	337	3.8	1.5	-3.5	264	0.9	0.9	0.1	192	1.9	0.4	1.9	84	9.3	-9.3	-0.9
21	258	4.8	4.7	1.0	231	4.0	3.1	2.5	315	0.6	0.4	-0.4	319	2.3	1.5	-1.7	286	3.3	3.2	-0.9	173	2.3	-0.3	2.3	85	12.1	-12.1	-1.0
22	243	5.8	5.2	2.6	243	5.9	5.2	2.7	19	2.1	-0.7	-2.0	313	3.4	2.5	-2.3	236	0.7	0.6	0.4	139	2.0	-1.3	1.5	85	14.1	-14.0	-1.2
23	224	3.9	2.7	2.8	234	4.1	3.3	2.4	12	1.4	-0.3	-1.4	2	3.5	-0.1	-3.5	323	1.0	0.6	-0.8	108	0.3	-0.3	0.1	94	11.4	-11.4	0.7
24	238	6.5	5.5	3.4	237	4.9	4.1	2.7	20	2.0	-0.7	-1.9	352	2.8	0.4	-2.8	352	0.7	0.1	-0.7	110	1.2	-1.1	0.4	87	11.2	-11.2	-0.5
25	233	6.4	5.1	3.9	240	4.8	4.1	2.4	15	3.0	-0.8	-2.9	357	3.4	0.2	-3.4	53	1.0	-0.8	-0.6	112	3.7	-3.4	1.4	89	14.2	-14.2	-0.2
26	227	5.3	3.9	3.6	239	2.9	2.5	1.5	359	4.3	0.1	-4.3	355	3.8	0.3	-3.8	13	1.3	-0.3	-1.3	85	3.4	-3.4	-0.3	92	13.9	-13.9	0.6
27	229	6.9	5.2	4.5	226	3.5	2.5	2.4	9	2.5	-0.4	-2.5	18	2.9	-0.9	-2.8	51	3.8	-3.0	-2.4	91	4.7	-4.7	0.1	82	14.9	-14.8	-2.1
28	247	5.8	5.3	2.3	250	4.1	3.9	1.4	350	3.6	0.6	-3.5	18	4.8	-1.5	-4.6	59	4.2	-3.6	-2.2	98	4.3	-4.3	0.6	85	14.3	-14.2	-1.2
29	236	7.3	6.1	4.1	235	5.1	4.2	2.9	355	2.2	0.2	-2.2	2	3.4	-0.1	-3.4	63	0.7	-0.6	-0.3	76	3.4	-3.3	-0.8	97	15.5	-15.4	2.0
30	222	6.2	4.1	4.6	218	4.7	2.9	3.7	96	1.0	-1.0	0.1	85	3.6	-3.6	-0.3	68	1.1	-1.0	-0.4	94	4.6	-4.6	0.3	79	16.6	-16.3	-3.1

Daily Normals of Upper Air Winds (1971-2000)

JODHPUR

JULY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	255	7.5	7.3	1.9	231	5.0	3.9	3.2	27	0.7	-0.3	-0.6	336	3.0	1.2	-2.7	122	1.5	-1.3	0.8	88	2.9	-2.9	-0.1	96	13.5	-13.4	1.3			
2	224	5.7	4.0	4.1	228	6.2	4.6	4.1	339	1.7	0.6	-1.6	346	3.2	0.8	-3.1	69	2.2	-2.1	-0.8	126	4.6	-3.7	2.7	88	14.7	-14.7	-0.6			
3	226	5.8	4.2	4.0	229	5.7	4.3	3.7	315	1.4	1.0	-1.0	326	2.3	1.3	-1.9	270	1.5	1.5	0.0	128	3.7	-2.9	2.3	87	15.5	-15.5	-0.8			
4	233	4.9	3.9	2.9	223	5.4	3.7	3.9	256	0.4	0.4	0.1	317	2.5	1.7	-1.8	107	2.1	-2.0	0.6	96	6.3	-6.3	0.7	82	16.4	-16.3	-2.2			
5	240	5.8	5.0	2.9	225	5.4	3.8	3.8	351	0.6	0.1	-0.6	332	1.9	0.9	-1.7	146	1.1	-0.6	0.9	123	5.0	-4.2	2.7	85	16.7	-16.6	-1.5			
6	236	6.9	5.7	3.9	233	6.0	4.8	3.6	4	1.4	-0.1	-1.4	351	1.8	0.3	-1.8	90	0.8	-0.8	0.0	98	6.9	-6.8	0.9	87	16.6	-16.6	-0.9			
7	239	6.5	5.6	3.3	238	5.1	4.3	2.7	360	2.0	0.0	-2.0	357	4.4	0.2	-4.4	57	1.7	-1.4	-0.9	104	6.9	-6.7	1.7	92	16.5	-16.5	0.5			
8	229	4.9	3.7	3.2	229	4.4	3.3	2.9	24	2.4	-1.0	-2.2	27	3.9	-1.8	-3.5	82	3.0	-3.0	-0.4	100	8.7	-8.6	1.5	89	18.4	-18.4	-0.2			
9	227	7.1	5.2	4.9	229	5.3	4.0	3.5	17	1.7	-0.5	-1.6	32	1.5	-0.8	-1.3	107	4.1	-3.9	1.2	112	7.9	-7.3	2.9	84	19.1	-19.0	-1.9			
10	232	5.8	4.6	3.6	237	5.0	4.2	2.7	355	2.1	0.2	-2.1	8	2.2	-0.3	-2.2	89	4.5	-4.5	-0.1	103	7.4	-7.2	1.6	77	19.7	-19.2	-4.4			
11	231	5.9	4.6	3.7	229	4.6	3.5	3.0	360	1.8	0.0	-1.8	25	2.3	-1.0	-2.1	80	2.3	-2.3	-0.4	98	6.8	-6.7	1.0	84	20.2	-20.1	-2.0			
12	260	4.6	4.5	0.8	240	5.9	5.1	2.9	353	2.3	0.3	-2.3	23	3.0	-1.2	-2.8	96	1.8	-1.8	0.2	92	6.9	-6.9	0.3	86	18.0	-17.9	-1.4			
13	238	4.6	3.9	2.4	234	4.3	3.5	2.5	17	2.8	-0.8	-2.7	360	2.2	0.0	-2.2	86	2.9	-2.9	-0.2	103	7.9	-7.7	1.8	84	16.8	-16.7	-1.7			
14	223	3.7	2.5	2.7	233	2.6	2.1	1.6	24	3.2	-1.3	-2.9	29	2.3	-1.1	-2.0	77	2.3	-2.2	-0.5	91	8.3	-8.3	0.2	91	17.8	-17.8	0.3			
15	227	4.1	3.0	2.8	246	4.4	4.0	1.8	341	2.4	0.8	-2.3	360	1.6	0.0	-1.6	114	3.0	-2.7	1.2	93	8.6	-8.6	0.4	87	19.8	-19.8	-0.9			
16	243	3.5	3.1	1.6	250	3.0	2.8	1.0	2	3.3	-0.1	-3.3	25	2.9	-1.2	-2.6	101	4.6	-4.5	0.9	107	9.6	-9.2	2.8	91	19.5	-19.5	0.2			
17	209	2.5	1.2	2.2	238	2.5	2.1	1.3	22	3.1	-1.2	-2.9	21	2.2	-0.8	-2.1	83	3.2	-3.2	-0.4	108	6.3	-6.0	1.9	85	18.9	-18.8	-1.7			
18	222	4.7	3.2	3.5	230	3.1	2.4	2.0	27	2.8	-1.3	-2.5	53	2.1	-1.7	-1.3	117	4.4	-3.9	2.0	107	7.9	-7.6	2.3	85	16.0	-15.9	-1.3			
19	236	4.2	3.5	2.4	221	2.8	1.8	2.1	43	2.6	-1.8	-1.9	85	1.1	-1.1	-0.1	117	4.0	-3.6	1.8	99	8.4	-8.3	1.3	87	17.3	-17.3	-0.8			
20	231	5.8	4.5	3.7	232	3.4	2.7	2.1	22	2.4	-0.9	-2.2	6	1.8	-0.2	-1.8	77	3.6	-3.5	-0.8	102	8.4	-8.2	1.8	87	18.3	-18.3	-1.1			
21	228	6.0	4.5	4.0	225	4.1	2.9	2.9	22	2.4	-0.9	-2.2	42	1.5	-1.0	-1.1	88	3.7	-3.7	-0.1	102	9.4	-9.2	1.9	91	19.8	-19.8	0.3			
22	238	5.5	4.7	2.9	240	3.0	2.6	1.5	27	3.1	-1.4	-2.8	27	1.8	-0.8	-1.6	87	5.5	-5.5	-0.3	105	11.0	-10.6	2.8	90	19.7	-19.7	-0.1			
23	248	4.8	4.5	1.8	248	3.5	3.2	1.3	8	2.8	-0.4	-2.8	40	1.7	-1.1	-1.3	81	5.8	-5.7	-0.9	95	10.2	-10.2	0.9	86	19.2	-19.1	-1.5			
24	237	7.2	6.1	3.9	246	4.3	3.9	1.7	357	3.4	0.2	-3.4	332	1.9	0.9	-1.7	92	4.6	-4.6	0.2	95	8.8	-8.8	0.7	85	17.2	-17.1	-1.4			
25	242	4.1	3.6	1.9	243	4.9	4.4	2.2	346	4.2	1.0	-4.1	348	3.3	0.7	-3.2	77	3.1	-3.0	-0.7	100	7.0	-6.9	1.2	84	14.1	-14.0	-1.4			
26	240	7.4	6.4	3.7	227	6.3	4.6	4.3	2	2.6	-0.1	-2.6	8	3.0	-0.4	-3.0	91	4.7	-4.7	0.1	100	9.4	-9.2	1.7	83	17.0	-16.9	-2.0			
27	242	4.7	4.2	2.2	238	4.5	3.8	2.4	14	4.2	-1.0	-4.1	37	3.4	-2.0	-2.7	95	5.6	-5.6	0.5	97	11.3	-11.2	1.3	92	20.6	-20.6	0.7			
28	232	4.4	3.5	2.7	224	4.7	3.3	3.4	2	3.1	-0.1	-3.1	358	2.6	0.1	-2.6	78	4.0	-3.9	-0.8	106	10.5	-10.1	2.9	89	20.7	-20.7	-0.5			
29	224	3.5	2.4	2.5	237	4.8	4.0	2.6	11	3.6	-0.7	-3.5	33	3.8	-2.1	-3.2	81	5.5	-5.4	-0.9	100	8.9	-8.8	1.5	91	17.7	-17.7	0.2			
30	221	4.6	3.0	3.5	232	3.6	2.8	2.2	16	3.7	-1.0	-3.6	34	3.4	-1.9	-2.8	94	6.0	-6.0	0.4	108	9.9	-9.4	3.0	89	20.0	-20.0	-0.3			
31	214	4.3	2.4	3.6	230	2.6	2.0	1.7	13	4.1	-0.9	-4.0	39	1.3	-0.8	-1.0	93	5.8	-5.8	0.3	99	10.6	-10.5	1.6	95	23.6	-23.5	1.9			

Daily Normals of Upper Air Winds (1971-2000)

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JODHPUR

AUGUST

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	224	6.6	4.6	4.7	229	4.4	3.3	2.9	10	2.7	-0.5	-2.7	48	2.8	-2.1	-1.9	84	6.5	-6.5	-0.7	92	12.9	-12.9	0.5	95	21.6	-21.5	2.0			
2	223	7.4	5.0	5.4	224	4.5	3.1	3.2	14	1.2	-0.3	-1.2	31	2.9	-1.5	-2.5	82	7.0	-6.9	-1.0	93	13.8	-13.8	0.7	88	19.8	-19.8	-0.8			
3	237	5.6	4.7	3.1	232	3.9	3.1	2.4	17	2.4	-0.7	-2.3	30	2.8	-1.4	-2.4	90	4.3	-4.3	0.0	94	9.3	-9.3	0.6	90	16.5	-16.5	0.1			
4	254	5.4	5.2	1.5	238	3.4	2.9	1.8	6	3.6	-0.4	-3.6	9	2.4	-0.4	-2.4	92	3.2	-3.2	0.1	98	10.3	-10.2	1.5	89	18.4	-18.4	-0.3			
5	234	6.4	5.2	3.8	235	3.3	2.7	1.9	7	3.2	-0.4	-3.2	43	2.6	-1.8	-1.9	91	5.6	-5.6	0.1	103	9.4	-9.2	2.1	89	18.7	-18.7	-0.2			
6	246	7.2	6.6	3.0	230	5.2	4.0	3.4	358	2.8	0.1	-2.8	45	2.4	-1.7	-1.7	83	4.9	-4.9	-0.6	93	9.1	-9.1	0.5	92	17.8	-17.8	0.7			
7	244	8.3	7.5	3.6	236	4.3	3.6	2.4	17	3.9	-1.1	-3.7	51	2.8	-2.2	-1.8	71	6.7	-6.3	-2.2	94	9.5	-9.5	0.7	94	19.3	-19.3	1.2			
8	227	8.3	6.1	5.6	203	3.4	1.3	3.1	54	2.7	-2.2	-1.6	64	3.2	-2.9	-1.4	71	6.9	-6.5	-2.3	103	9.5	-9.2	2.2	91	18.0	-18.0	0.4			
9	221	6.5	4.3	4.9	227	3.3	2.4	2.2	20	3.0	-1.0	-2.8	21	2.5	-0.9	-2.3	77	5.7	-5.6	-1.3	96	9.9	-9.8	1.1	84	16.4	-16.3	-1.7			
10	227	4.7	3.4	3.2	245	2.3	2.1	1.0	34	4.3	-2.4	-3.6	57	4.4	-3.7	-2.4	81	5.8	-5.7	-0.9	97	8.6	-8.5	1.1	94	18.1	-18.0	1.4			
11	293	5.3	4.9	-2.1	233	3.0	2.4	1.8	6	2.9	-0.3	-2.9	24	2.2	-0.9	-2.0	92	5.3	-5.3	0.2	107	9.4	-9.0	2.7	84	14.1	-14.0	-1.4			
12	215	3.9	2.2	3.2	229	4.6	3.5	3.0	360	1.9	0.0	-1.9	9	3.8	-0.6	-3.8	89	3.9	-3.9	-0.1	93	6.3	-6.3	0.3	81	19.8	-19.6	-3.0			
13	232	7.3	5.8	4.5	234	4.7	3.8	2.8	11	3.2	-0.6	-3.1	16	4.3	-1.2	-4.1	79	4.3	-4.2	-0.8	99	7.9	-7.8	1.3	89	16.0	-16.0	-0.3			
14	232	5.8	4.6	3.6	247	3.8	3.5	1.5	21	3.0	-1.1	-2.8	2	3.3	-0.1	-3.3	67	2.8	-2.6	-1.1	90	8.5	-8.5	0.0	94	16.4	-16.4	1.2			
15	240	6.6	5.7	3.3	246	3.7	3.4	1.5	8	3.4	-0.5	-3.4	9	2.4	-0.4	-2.4	91	4.1	-4.1	0.1	87	6.0	-6.0	-0.3	81	15.1	-14.9	-2.4			
16	266	12.5	12.5	0.8	244	3.2	2.9	1.4	354	2.9	0.3	-2.9	346	0.4	0.1	-0.4	92	2.4	-2.4	0.1	115	6.3	-5.7	2.7	94	15.2	-15.2	1.1			
17	230	5.7	4.4	3.7	244	3.0	2.7	1.3	26	2.8	-1.2	-2.5	69	1.7	-1.6	-0.6	115	4.5	-4.1	1.9	103	7.1	-6.9	1.6	87	15.4	-15.4	-0.8			
18	231	6.0	4.7	3.8	232	2.3	1.8	1.4	13	2.6	-0.6	-2.5	73	1.4	-1.3	-0.4	107	3.4	-3.2	1.0	120	4.2	-3.6	2.1	88	14.5	-14.5	-0.4			
19	223	4.1	2.8	3.0	245	2.6	2.4	1.1	8	3.6	-0.5	-3.6	6	2.8	-0.3	-2.8	77	3.7	-3.6	-0.8	114	6.4	-5.8	2.6	79	12.1	-11.9	-2.3			
20	226	5.9	4.3	4.1	252	3.5	3.3	1.1	24	3.2	-1.3	-2.9	36	3.2	-1.9	-2.6	89	4.3	-4.3	-0.1	99	8.6	-8.5	1.4	100	12.6	-12.4	2.2			
21	236	5.0	4.2	2.8	256	3.6	3.5	0.9	10	3.4	-0.6	-3.3	16	1.8	-0.5	-1.7	94	2.7	-2.7	0.2	93	6.3	-6.3	0.3	100	15.0	-14.8	2.5			
22	233	4.3	3.4	2.6	267	2.1	2.1	0.1	9	3.7	-0.6	-3.7	351	1.8	0.3	-1.8	79	3.6	-3.5	-0.7	108	9.3	-8.8	2.9	96	17.9	-17.8	1.8			
23	224	3.7	2.6	2.7	243	3.5	3.1	1.6	13	3.9	-0.9	-3.8	4	1.6	-0.1	-1.6	98	2.2	-2.2	0.3	111	6.4	-6.0	2.3	92	16.2	-16.2	0.5			
24	212	2.2	1.2	1.9	229	2.8	2.1	1.8	14	3.3	-0.8	-3.2	345	3.1	0.8	-3.0	73	1.7	-1.6	-0.5	114	6.4	-5.9	2.6	90	15.3	-15.3	0.1			
25	253	2.1	2.0	0.6	250	3.0	2.8	1.0	13	4.8	-1.1	-4.7	332	3.0	1.4	-2.6	121	1.2	-1.0	0.6	119	7.1	-6.2	3.5	90	13.0	-13.0	-0.1			
26	282	3.4	3.3	-0.7	253	2.7	2.6	0.8	17	5.2	-1.5	-5.0	330	2.2	1.1	-1.9	169	2.5	-0.5	2.5	136	7.9	-5.5	5.7	100	8.9	-8.8	1.5			
27	203	1.3	0.5	1.2	236	2.9	2.4	1.6	360	3.8	0.0	-3.8	2	2.3	-0.1	-2.3	88	2.4	-2.4	-0.1	105	6.6	-6.4	1.7	93	13.6	-13.6	0.6			
28	252	2.6	2.5	0.8	238	1.3	1.1	0.7	22	4.1	-1.5	-3.8	353	1.7	0.2	-1.7	100	1.7	-1.7	0.3	93	5.3	-5.3	0.3	102	13.4	-13.1	2.9			
29	264	2.8	2.8	0.3	221	1.1	0.7	0.8	17	4.5	-1.3	-4.3	67	0.8	-0.7	-0.3	137	2.5	-1.7	1.8	127	5.0	-4.0	3.0	103	11.6	-11.3	2.6			
30	239	4.1	3.5	2.1	304	0.7	0.6	-0.4	28	3.8	-1.8	-3.4	349	2.6	0.5	-2.6	85	1.1	-1.1	-0.1	123	5.0	-4.2	2.7	96	14.2	-14.1	1.4			
31	224	3.3	2.3	2.4	245	2.1	1.9	0.9	17	4.1	-1.2	-3.9	7	1.6	-0.2	-1.6	90	0.3	-0.3	0.0	147	4.5	-2.5	3.8	99	12.9	-12.7	2.1			

Daily Normals of Upper Air Winds (1971-2000)

JODHPUR

SEPTEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	232	2.4	1.9	1.5	257	1.8	1.8	0.4	20	4.1	-1.4	-3.9	3	1.8	-0.1	-1.8	231	0.6	0.5	0.4	158	4.5	-1.7	4.2	87	12.4	-12.4	-0.6
2	227	2.2	1.6	1.5	231	3.2	2.5	2.0	7	2.6	-0.3	-2.6	5	2.2	-0.2	-2.2	162	1.3	-0.4	1.2	145	3.5	-2.0	2.9	85	11.1	-11.1	-0.9
3	235	3.9	3.2	2.2	240	2.2	1.9	1.1	17	2.4	-0.7	-2.3	4	1.4	-0.1	-1.4	151	1.0	-0.5	0.9	111	3.6	-3.4	1.3	86	9.4	-9.4	-0.6
4	236	4.5	3.7	2.5	240	3.2	2.8	1.6	7	1.7	-0.2	-1.7	299	2.5	2.2	-1.2	225	1.1	0.8	0.8	142	2.3	-1.4	1.8	91	9.7	-9.7	0.2
5	256	3.6	3.5	0.9	237	3.7	3.1	2.0	351	1.8	0.3	-1.8	315	2.5	1.8	-1.8	242	1.5	1.3	0.7	142	2.8	-1.7	2.2	95	10.6	-10.6	0.9
6	265	1.2	1.2	0.1	246	3.7	3.4	1.5	349	3.2	0.6	-3.1	330	3.4	1.7	-3.0	225	2.0	1.4	1.4	129	2.2	-1.7	1.4	93	10.1	-10.1	0.6
7	202	2.4	0.9	2.2	256	4.1	4.0	1.0	348	3.4	0.7	-3.3	332	2.6	1.2	-2.3	255	2.0	1.9	0.5	164	2.2	-0.6	2.1	84	11.5	-11.4	-1.2
8	241	1.3	1.1	0.6	238	4.1	3.5	2.2	336	2.2	0.9	-2.0	259	3.1	3.0	0.6	218	2.4	1.5	1.9	174	2.7	-0.3	2.7	97	9.2	-9.1	1.1
9	237	1.7	1.4	0.9	248	3.7	3.4	1.4	336	1.2	0.5	-1.1	292	3.1	2.9	-1.2	243	2.8	2.5	1.3	190	2.8	0.5	2.8	88	8.5	-8.5	-0.3
10	270	0.6	0.6	0.0	255	2.4	2.3	0.6	339	2.2	0.8	-2.1	310	2.3	1.8	-1.5	231	3.5	2.7	2.2	208	4.3	2.0	3.8	95	9.4	-9.4	0.9
11	176	1.3	-0.1	1.3	278	1.4	1.4	-0.2	2	2.4	-0.1	-2.4	308	2.3	1.8	-1.4	242	3.0	2.6	1.4	201	3.4	1.2	3.2	97	7.4	-7.3	0.9
12	254	4.0	3.8	1.1	267	2.2	2.2	0.1	3	2.1	-0.1	-2.1	300	2.8	2.4	-1.4	236	2.9	2.4	1.6	201	3.9	1.4	3.6	88	7.3	-7.3	-0.3
13	262	3.0	3.0	0.4	268	2.5	2.5	0.1	360	2.5	0.0	-2.5	285	3.0	2.9	-0.8	244	4.3	3.9	1.9	207	4.2	1.9	3.8	105	7.9	-7.6	2.0
14	265	3.2	3.2	0.3	255	2.7	2.6	0.7	6	1.9	-0.2	-1.9	306	2.6	2.1	-1.5	256	5.3	5.1	1.3	240	5.0	4.3	2.5	108	6.0	-5.7	1.8
15	260	3.4	3.3	0.6	249	4.0	3.7	1.4	355	2.4	0.2	-2.4	296	3.0	2.7	-1.3	256	5.3	5.1	1.3	227	4.5	3.3	3.1	107	7.0	-6.7	2.0
16	246	4.2	3.8	1.7	258	3.5	3.4	0.7	348	2.9	0.6	-2.8	293	2.6	2.4	-1.0	248	5.0	4.6	1.9	230	5.3	4.1	3.4	123	6.3	-5.3	3.4
17	248	3.8	3.5	1.4	252	2.6	2.5	0.8	349	2.0	0.4	-2.0	279	3.0	3.0	-0.5	256	7.0	6.8	1.7	242	7.0	6.2	3.3	124	4.0	-3.3	2.2
18	245	4.7	4.2	2.0	253	3.7	3.5	1.1	319	1.8	1.2	-1.4	281	3.7	3.6	-0.7	257	6.5	6.3	1.5	240	8.0	6.9	4.0	117	3.3	-2.9	1.5
19	239	3.9	3.3	2.0	244	2.8	2.5	1.2	135	0.3	-0.2	0.2	288	2.2	2.1	-0.7	247	8.5	7.8	3.3	234	6.6	5.3	3.9	126	5.8	-4.7	3.4
20	237	5.3	4.4	2.9	243	2.0	1.8	0.9	12	1.4	-0.3	-1.4	285	3.0	2.9	-0.8	250	9.0	8.5	3.1	246	9.4	8.6	3.8	151	2.9	-1.4	2.5
21	227	3.5	2.6	2.4	266	1.3	1.3	0.1	16	1.9	-0.5	-1.8	294	3.5	3.2	-1.4	249	7.9	7.4	2.9	243	10.8	9.6	4.9	173	3.4	-0.4	3.4
22	232	1.8	1.4	1.1	313	1.8	1.3	-1.2	358	2.3	0.1	-2.3	286	4.5	4.3	-1.2	252	10.1	9.6	3.2	243	12.1	10.8	5.4	170	2.9	-0.5	2.9
23	177	1.8	-0.1	1.8	299	1.0	0.9	-0.5	360	2.1	0.0	-2.1	280	4.0	3.9	-0.7	257	9.8	9.6	2.2	246	11.9	10.8	4.9	204	4.3	1.7	3.9
24	270	1.2	1.2	0.0	333	1.1	0.5	-1.0	14	2.1	-0.5	-2.0	293	4.1	3.8	-1.6	257	10.1	9.9	2.2	246	11.0	10.1	4.4	189	0.6	0.1	0.6
25	300	1.6	1.4	-0.8	324	1.4	0.8	-1.1	343	2.8	0.8	-2.7	296	3.7	3.3	-1.6	261	9.1	9.0	1.5	249	10.8	10.1	3.8	151	2.1	-1.0	1.8
26	249	2.5	2.3	0.9	305	2.1	1.7	-1.2	333	2.7	1.2	-2.4	300	3.9	3.4	-2.0	271	11.0	11.0	-0.2	258	12.9	12.6	2.7	281	1.0	1.0	-0.2
27	267	6.5	6.5	0.3	262	2.2	2.2	0.3	323	2.5	1.5	-2.0	293	4.1	3.8	-1.6	265	12.7	12.6	1.2	258	12.5	12.2	2.7	170	1.7	-0.3	1.7
28	258	1.4	1.4	0.3	289	2.1	2.0	-0.7	342	2.5	0.8	-2.4	308	4.6	3.6	-2.8	254	11.9	11.4	3.3	253	12.8	12.2	3.8	251	4.0	3.8	1.3
29	253	1.4	1.3	0.4	287	1.4	1.3	-0.4	306	1.7	1.4	-1.0	279	5.0	4.9	-0.8	264	14.4	14.3	1.4	264	14.3	14.2	1.4	256	2.5	2.4	0.6
30	256	1.2	1.2	0.3	292	1.8	1.7	-0.7	315	2.4	1.7	-1.7	284	7.2	7.0	-1.7	266	13.6	13.6	1.0	254	14.8	14.2	4.1	254	6.4	6.1	1.8

Daily Normals of Upper Air Winds (1971-2000)

JODHPUR

OCTOBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	221	0.9	0.6	0.7	285	1.1	1.1	-0.3	312	1.3	1.0	-0.9	276	5.5	5.5	-0.6	263	12.3	12.2	1.5	256	16.0	15.5	4.0	199	5.6	1.8	5.3
2	252	1.6	1.5	0.5	330	1.4	0.7	-1.2	330	2.2	1.1	-1.9	284	4.9	4.7	-1.2	262	15.8	15.6	2.3	253	18.0	17.2	5.2	187	4.1	0.5	4.1
3	246	2.0	1.8	0.8	302	1.9	1.6	-1.0	328	2.2	1.2	-1.9	295	5.7	5.2	-2.4	262	12.8	12.7	1.8	256	13.3	12.9	3.1	232	2.4	1.9	1.5
4	262	2.2	2.2	0.3	308	1.6	1.3	-1.0	342	3.2	1.0	-3.0	310	6.0	4.6	-3.9	269	12.7	12.7	0.3	253	14.6	14.0	4.2	215	6.6	3.8	5.4
5	307	1.5	1.2	-0.9	321	2.2	1.4	-1.7	352	2.9	0.4	-2.9	303	5.9	4.9	-3.2	259	12.0	11.8	2.4	248	13.0	12.0	4.9	259	3.8	3.7	0.7
6	284	1.2	1.2	-0.3	317	1.9	1.3	-1.4	349	3.1	0.6	-3.0	289	6.5	6.1	-2.1	265	13.0	13.0	1.1	257	16.2	15.8	3.7	219	4.4	2.8	3.4
7	323	2.1	1.3	-1.7	302	1.3	1.1	-0.7	336	2.4	1.0	-2.2	284	6.8	6.6	-1.6	262	15.5	15.4	2.1	254	18.8	18.0	5.3	243	10.7	9.5	4.9
8	4	1.6	-0.1	-1.6	306	1.7	1.4	-1.0	324	3.2	1.9	-2.6	294	9.0	8.2	-3.6	272	16.5	16.5	-0.5	254	18.5	17.8	5.2	255	6.8	6.6	1.8
9	3	2.1	-0.1	-2.1	318	1.5	1.0	-1.1	326	3.2	1.8	-2.7	291	7.7	7.2	-2.8	265	15.0	14.9	1.3	255	18.2	17.6	4.7	262	5.2	5.2	0.7
10	17	1.4	-0.4	-1.3	299	1.8	1.6	-0.9	331	2.5	1.2	-2.2	283	9.2	9.0	-2.0	264	19.0	18.9	2.1	262	23.2	23.0	3.4	254	9.2	8.9	2.5
11	35	1.6	-0.9	-1.3	294	1.7	1.6	-0.7	342	2.2	0.7	-2.1	282	8.7	8.5	-1.8	267	19.5	19.5	0.9	261	22.7	22.4	3.6	271	8.3	8.3	-0.2
12	30	0.8	-0.4	-0.7	288	2.5	2.4	-0.8	337	3.0	1.2	-2.8	283	8.9	8.7	-2.0	262	19.3	19.1	2.6	265	20.8	20.7	1.8	259	7.0	6.9	1.4
13	323	0.5	0.3	-0.4	275	2.5	2.5	-0.2	302	2.5	2.1	-1.3	280	8.9	8.8	-1.6	269	18.4	18.4	0.3	262	22.1	21.9	2.9	256	9.2	8.9	2.2
14	297	0.4	0.4	-0.2	294	2.0	1.8	-0.8	297	2.2	2.0	-1.0	292	9.4	8.7	-3.5	262	18.5	18.3	2.7	254	23.5	22.6	6.3	246	12.6	11.5	5.2
15	44	3.7	-2.6	-2.7	305	1.2	1.0	-0.7	286	2.2	2.1	-0.6	280	8.4	8.3	-1.4	268	19.4	19.4	0.6	258	24.8	24.3	5.0	248	6.6	6.1	2.5
16	23	3.8	-1.5	-3.5	313	2.1	1.5	-1.4	305	2.1	1.7	-1.2	275	9.8	9.8	-0.9	267	20.4	20.4	1.0	255	23.3	22.5	6.1	251	11.6	11.0	3.8
17	25	6.8	-2.9	-6.1	339	1.9	0.7	-1.8	305	2.8	2.3	-1.6	285	8.8	8.5	-2.2	268	22.4	22.4	0.8	262	25.8	25.5	3.8	255	14.5	14.0	3.7
18	276	1.0	1.0	-0.1	307	2.1	1.7	-1.3	303	2.4	2.0	-1.3	282	8.8	8.6	-1.8	263	20.2	20.0	2.6	252	23.7	22.5	7.3	242	10.2	9.0	4.7
19	270	3.2	3.2	0.0	281	2.5	2.5	-0.5	290	2.9	2.7	-1.0	287	10.3	9.9	-3.0	270	21.4	21.4	0.1	265	26.8	26.7	2.4	263	14.8	14.7	1.9
20	290	3.3	3.1	-1.1	315	1.6	1.1	-1.1	299	2.3	2.0	-1.1	282	9.4	9.2	-2.0	275	18.6	18.5	-1.6	262	24.1	23.9	3.4	267	13.2	13.2	0.7
21	341	2.1	0.7	-2.0	327	1.7	0.9	-1.4	305	2.8	2.3	-1.6	277	8.4	8.3	-1.0	270	21.1	21.1	0.1	261	26.6	26.3	4.0	264	12.8	12.7	1.4
22	245	3.8	3.5	1.6	261	2.0	2.0	0.3	261	2.4	2.4	0.4	276	8.3	8.3	-0.8	266	22.8	22.8	1.5	263	27.8	27.6	3.5	271	9.8	9.8	-0.1
23	360	1.2	0.0	-1.2	336	1.0	0.4	-0.9	297	2.2	2.0	-1.0	283	10.1	9.8	-2.3	272	22.0	22.0	-0.6	267	28.5	28.5	1.3	252	7.5	7.1	2.3
24	347	1.3	0.3	-1.3	360	1.3	0.0	-1.3	309	2.6	2.0	-1.6	280	8.7	8.6	-1.5	267	26.8	26.8	1.2	262	31.8	31.5	4.5	264	17.3	17.2	1.8
25	252	0.9	0.9	0.3	309	1.3	1.0	-0.8	309	1.9	1.5	-1.2	290	10.0	9.4	-3.5	273	24.4	24.4	-1.4	262	32.4	32.1	4.3	268	19.0	19.0	0.7
26	291	0.9	0.8	-0.3	315	2.0	1.4	-1.4	303	2.7	2.3	-1.5	288	10.4	9.9	-3.2	271	25.6	25.6	-0.5	261	32.4	32.0	5.3	276	14.1	14.0	-1.4
27	348	1.4	0.3	-1.4	319	2.0	1.3	-1.5	329	2.3	1.2	-2.0	285	9.7	9.4	-2.5	268	23.8	23.8	0.7	259	30.6	30.0	6.0	264	14.2	14.1	1.6
28	354	1.9	0.2	-1.9	324	1.9	1.1	-1.5	341	1.8	0.6	-1.7	283	7.7	7.5	-1.7	272	21.3	21.3	-0.7	263	27.3	27.1	3.1	270	14.5	14.5	0.0
29	350	2.8	0.5	-2.8	339	1.7	0.6	-1.6	325	2.4	1.4	-2.0	292	7.6	7.1	-2.8	275	21.1	21.0	-1.7	264	28.6	28.5	2.8	268	15.2	15.2	0.5
30	18	1.6	-0.5	-1.5	360	1.5	0.0	-1.5	324	2.2	1.3	-1.8	291	8.5	7.9	-3.0	270	23.2	23.2	-0.1	263	29.4	29.2	3.4	267	15.7	15.7	0.8
31	25	2.1	-0.9	-1.9	17	2.1	-0.6	-2.0	309	1.9	1.5	-1.2	286	8.9	8.6	-2.4	274	21.1	21.0	-1.6	263	30.0	29.8	3.4	266	14.2	14.2	1.0

Daily Normals of Upper Air Winds (1971-2000)

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JODHPUR

NOVEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	27	2.2	-1.0	-2.0	10	1.7	-0.3	-1.7	328	2.6	1.4	-2.2	288	11.2	10.7	-3.4	277	23.0	22.8	-2.7	269	28.1	28.1	0.7	272	17.8	17.8	-0.6			
2	16	1.5	-0.4	-1.4	360	1.4	0.0	-1.4	353	1.7	0.2	-1.7	279	9.5	9.4	-1.5	274	24.1	24.1	-1.5	265	30.1	30.0	2.7	283	11.9	11.6	-2.6			
3	360	0.4	0.0	-0.4	344	0.7	0.2	-0.7	319	2.9	1.9	-2.2	285	11.7	11.3	-3.0	277	25.9	25.7	-3.0	274	31.9	31.8	-2.2	269	17.6	17.6	0.3			
4	283	0.9	0.9	-0.2	344	1.8	0.5	-1.7	332	2.4	1.1	-2.1	289	12.2	11.5	-4.0	282	26.9	26.3	-5.5	268	32.3	32.3	1.3	279	11.9	11.8	-1.8			
5	326	0.7	0.4	-0.6	5	1.2	-0.1	-1.2	322	2.3	1.4	-1.8	289	12.4	11.7	-4.1	274	26.4	26.3	-2.0	266	33.9	33.8	2.5	263	16.6	16.5	2.0			
6	357	1.7	0.1	-1.7	349	1.5	0.3	-1.5	308	2.8	2.2	-1.7	279	12.1	12.0	-1.9	274	27.3	27.2	-1.7	271	30.7	30.7	-0.4	272	14.6	14.6	-0.5			
7	16	2.2	-0.6	-2.1	345	1.6	0.4	-1.5	300	2.4	2.1	-1.2	277	12.4	12.3	-1.5	267	28.5	28.5	1.5	270	34.9	34.9	0.3	286	23.3	22.4	-6.3			
8	6	1.9	-0.2	-1.9	328	1.3	0.7	-1.1	289	3.1	2.9	-1.0	284	11.8	11.4	-2.9	273	28.3	28.3	-1.4	267	35.4	35.4	1.8	273	20.7	20.7	-1.1			
9	339	1.7	0.6	-1.6	351	1.3	0.2	-1.3	302	3.1	2.6	-1.6	287	11.0	10.5	-3.3	275	26.8	26.7	-2.3	266	36.6	36.5	2.7	270	17.1	17.1	0.0			
10	27	2.2	-1.0	-2.0	360	1.3	0.0	-1.3	305	2.9	2.4	-1.7	289	11.3	10.7	-3.6	280	27.0	26.6	-4.5	272	34.3	34.3	-1.0	266	18.6	18.5	1.4			
11	23	1.3	-0.5	-1.2	22	1.1	-0.4	-1.0	290	4.6	4.3	-1.6	288	13.3	12.6	-4.1	276	27.7	27.5	-3.0	267	37.5	37.4	2.2	276	18.2	18.1	-2.0			
12	41	3.0	-2.0	-2.3	8	1.5	-0.2	-1.5	310	3.8	2.9	-2.4	287	12.4	11.8	-3.7	271	26.5	26.5	-0.5	268	34.4	34.4	1.0	274	16.8	16.8	-1.1			
13	27	1.8	-0.8	-1.6	9	2.0	-0.3	-2.0	306	3.1	2.5	-1.8	287	12.0	11.5	-3.5	274	24.5	24.4	-1.8	261	30.4	30.0	4.9	273	14.7	14.7	-0.7			
14	35	2.8	-1.6	-2.3	13	1.3	-0.3	-1.3	307	3.0	2.4	-1.8	278	11.3	11.2	-1.6	270	27.6	27.6	0.2	266	36.3	36.2	2.8	274	15.9	15.9	-1.0			
15	69	2.2	-2.1	-0.8	11	0.5	-0.1	-0.5	292	3.5	3.2	-1.3	272	12.2	12.2	-0.4	268	24.6	24.6	0.8	257	34.4	33.6	7.5	273	20.8	20.8	-1.0			
16	43	1.9	-1.3	-1.4	323	1.0	0.6	-0.8	278	3.6	3.6	-0.5	274	15.3	15.3	-1.0	264	28.3	28.2	2.9	260	34.7	34.1	6.3	269	20.9	20.9	0.2			
17	291	1.7	1.6	-0.6	313	1.6	1.2	-1.1	292	4.1	3.8	-1.5	276	14.2	14.1	-1.6	270	29.5	29.5	-0.1	259	40.9	40.1	7.8	267	21.0	21.0	1.1			
18	357	1.8	0.1	-1.8	11	1.6	-0.3	-1.6	283	4.1	4.0	-0.9	272	13.1	13.1	-0.5	266	29.9	29.8	2.0	258	40.9	40.0	8.3	263	20.8	20.7	2.4			
19	360	2.2	0.0	-2.2	336	1.2	0.5	-1.1	284	4.6	4.5	-1.1	279	14.7	14.5	-2.3	272	29.3	29.3	-0.8	266	38.2	38.1	2.8	268	19.4	19.4	0.8			
20	13	2.2	-0.5	-2.1	348	1.4	0.3	-1.4	291	3.4	3.2	-1.2	276	11.8	11.7	-1.3	273	28.4	28.4	-1.3	264	35.6	35.4	3.8	267	23.8	23.8	1.1			
21	18	2.2	-0.7	-2.1	40	0.8	-0.5	-0.6	275	3.3	3.3	-0.3	264	13.3	13.2	1.5	262	30.3	30.0	4.1	261	38.6	38.1	5.9	263	25.4	25.2	3.3			
22	33	2.4	-1.3	-2.0	352	0.7	0.1	-0.7	272	3.6	3.6	-0.1	275	15.4	15.3	-1.4	274	27.6	27.5	-1.7	277	35.3	35.0	-4.4	270	23.7	23.7	0.1			
23	37	3.0	-1.8	-2.4	18	0.9	-0.3	-0.9	285	3.8	3.7	-1.0	273	12.6	12.6	-0.7	268	29.3	29.3	0.9	258	36.3	35.5	7.5	271	21.8	21.8	-0.3			
24	39	2.8	-1.8	-2.2	27	1.3	-0.6	-1.2	273	5.0	5.0	-0.3	280	14.0	13.8	-2.4	273	28.6	28.6	-1.5	266	35.2	35.1	2.2	273	21.2	21.2	-1.0			
25	306	1.4	1.1	-0.8	339	1.4	0.5	-1.3	275	5.0	5.0	-0.4	277	14.2	14.1	-1.7	272	29.6	29.6	-1.2	260	39.8	39.2	7.0	268	25.2	25.2	0.9			
26	299	1.0	0.9	-0.5	326	1.1	0.6	-0.9	273	5.1	5.1	-0.3	274	16.8	16.8	-1.2	271	32.1	32.1	-0.4	267	34.0	34.0	1.6	268	19.3	19.3	0.6			
27	31	1.2	-0.6	-1.0	357	2.2	0.1	-2.2	291	6.0	5.6	-2.1	273	14.9	14.9	-0.7	265	32.4	32.3	2.9	259	40.8	40.1	7.7	265	23.5	23.4	2.1			
28	22	2.4	-0.9	-2.2	14	2.5	-0.6	-2.4	300	4.8	4.2	-2.4	281	15.5	15.2	-2.9	268	32.5	32.5	1.3	258	42.7	41.8	8.6	271	28.7	28.7	-0.4			
29	30	2.0	-1.0	-1.7	360	1.3	0.0	-1.3	279	5.3	5.2	-0.8	274	17.8	17.8	-1.2	268	34.6	34.6	1.4	265	41.3	41.1	3.8	268	20.9	20.9	0.6			
30	29	3.8	-1.8	-3.3	15	1.1	-0.3	-1.1	278	4.9	4.9	-0.7	273	15.4	15.4	-0.8	266	33.3	33.2	2.2	260	41.4	40.8	7.2	266	22.7	22.7	1.4			

Daily Normals of Upper Air Winds (1971-2000)

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JODHPUR

DECEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	35	2.1	-1.2	-1.7	328	0.9	0.5	-0.8	282	5.7	5.6	-1.2	274	15.7	15.7	-1.0	271	32.4	32.4	-0.7	265	42.0	41.8	4.0	257	23.0	22.4	5.2			
2	56	1.8	-1.5	-1.0	18	0.3	-0.1	-0.3	276	5.5	5.5	-0.6	267	16.1	16.1	0.8	268	33.0	33.0	0.9	267	37.0	36.9	2.0	266	27.7	27.6	1.8			
3	43	1.6	-1.1	-1.2	55	1.2	-1.0	-0.7	293	5.7	5.3	-2.2	273	15.5	15.5	-0.8	267	31.2	31.1	1.8	270	36.1	36.1	0.1	270	24.1	24.1	-0.2			
4	35	1.9	-1.1	-1.6	24	1.2	-0.5	-1.1	269	5.0	5.0	0.1	271	16.7	16.7	-0.4	267	31.7	31.7	1.5	262	38.0	37.6	5.5	264	20.8	20.7	2.0			
5	58	1.3	-1.1	-0.7	27	1.6	-0.7	-1.4	274	6.6	6.6	-0.5	273	16.5	16.5	-0.9	270	31.5	31.5	0.1	261	39.8	39.3	6.4	266	28.7	28.6	2.1			
6	15	1.6	-0.4	-1.5	18	0.9	-0.3	-0.9	279	5.7	5.6	-0.9	273	16.0	16.0	-0.7	265	31.4	31.3	2.7	262	40.7	40.3	5.8	266	33.1	33.0	2.5			
7	42	1.2	-0.8	-0.9	340	1.2	0.4	-1.1	283	6.6	6.4	-1.5	272	19.3	19.3	-0.6	267	31.7	31.7	1.4	259	43.2	42.5	7.9	263	28.4	28.2	3.3			
8	306	1.9	1.5	-1.1	310	1.7	1.3	-1.1	277	7.2	7.1	-0.9	268	17.9	17.9	0.5	259	31.5	30.9	6.1	256	40.6	39.5	9.6	266	28.0	27.9	2.0			
9	321	2.1	1.3	-1.6	339	1.4	0.5	-1.3	283	6.6	6.4	-1.5	275	16.5	16.4	-1.4	268	32.0	32.0	1.3	268	42.9	42.9	1.7	266	25.5	25.4	1.7			
10	319	0.9	0.6	-0.7	333	1.3	0.6	-1.2	273	6.4	6.4	-0.3	274	18.8	18.7	-1.4	270	37.5	37.5	0.3	272	44.6	44.6	-1.3	269	29.8	29.8	0.6			
11	68	1.6	-1.5	-0.6	348	1.4	0.3	-1.4	276	7.7	7.7	-0.8	275	19.3	19.2	-1.8	268	37.7	37.7	1.6	266	40.5	40.4	2.7	272	27.4	27.4	-0.8			
12	28	1.9	-0.9	-1.7	3	1.8	-0.1	-1.8	274	7.5	7.5	-0.5	265	19.0	18.9	1.6	262	33.1	32.8	4.4	261	38.1	37.6	6.0	270	28.2	28.2	0.2			
13	33	2.4	-1.3	-2.0	331	2.1	1.0	-1.8	278	8.3	8.2	-1.1	283	17.3	16.9	-3.8	270	31.7	31.7	-0.2	264	37.6	37.4	3.7	266	34.3	34.2	2.3			
14	351	1.9	0.3	-1.9	306	0.9	0.7	-0.5	278	7.5	7.4	-1.0	276	17.6	17.5	-1.9	271	31.8	31.8	-0.7	269	39.0	39.0	0.7	282	28.8	28.2	-5.8			
15	356	1.4	0.1	-1.4	37	0.5	-0.3	-0.4	270	7.3	7.3	0.0	274	17.7	17.7	-1.3	276	31.9	31.7	-3.4	270	38.7	38.7	-0.3	275	27.4	27.3	-2.6			
16	337	1.5	0.6	-1.4	328	0.9	0.5	-0.8	278	7.1	7.0	-1.0	269	17.3	17.3	0.2	263	36.1	35.8	4.5	262	44.0	43.5	6.3	266	31.8	31.7	2.2			
17	49	0.9	-0.7	-0.6	19	1.8	-0.6	-1.7	277	7.1	7.0	-0.9	274	16.3	16.3	-1.0	272	29.6	29.6	-0.8	265	36.1	36.0	2.9	264	27.6	27.5	2.8			
18	29	2.1	-1.0	-1.8	7	1.7	-0.2	-1.7	274	5.7	5.7	-0.4	278	14.6	14.4	-2.1	275	31.6	31.5	-2.8	272	41.1	41.1	-1.1	282	32.2	31.5	-6.5			
19	50	1.7	-1.3	-1.1	14	1.6	-0.4	-1.6	281	6.2	6.1	-1.2	270	15.2	15.2	-0.1	272	29.5	29.5	-1.2	271	34.3	34.3	-0.3	270	26.9	26.9	0.1			
20	14	1.6	-0.4	-1.6	353	1.6	0.2	-1.6	280	7.8	7.7	-1.3	273	16.6	16.6	-1.0	268	33.8	33.8	1.3	262	45.5	45.1	6.1	268	26.9	26.9	1.0			
21	21	1.7	-0.6	-1.6	338	1.6	0.6	-1.5	280	5.6	5.5	-1.0	272	17.3	17.3	-0.7	270	31.5	31.5	-0.1	273	38.5	38.4	-2.1	276	35.7	35.5	-3.8			
22	15	2.0	-0.5	-1.9	347	1.3	0.3	-1.3	273	7.1	7.1	-0.4	274	17.4	17.4	-1.3	275	34.0	33.9	-2.7	270	42.2	42.2	-0.1	277	37.0	36.7	-4.6			
23	43	2.1	-1.4	-1.5	8	1.5	-0.2	-1.5	276	6.8	6.8	-0.7	276	17.2	17.1	-1.7	279	35.0	34.5	-5.7	275	45.2	45.0	-4.1	272	33.2	33.2	-1.2			
24	27	1.8	-0.8	-1.6	306	1.7	1.4	-1.0	280	6.8	6.7	-1.2	279	16.1	15.9	-2.4	281	35.6	34.9	-6.8	277	43.7	43.4	-5.1	290	29.2	27.5	-9.8			
25	63	0.9	-0.8	-0.4	338	0.5	0.2	-0.5	273	7.5	7.5	-0.4	275	19.0	18.9	-1.6	276	35.4	35.2	-4.0	271	44.4	44.4	-0.4	276	28.2	28.1	-2.9			
26	47	2.1	-1.5	-1.4	274	1.5	1.5	-0.1	269	8.7	8.7	0.1	272	21.7	21.7	-0.6	276	36.3	36.1	-4.0	270	40.8	40.8	-0.1	281	34.0	33.3	-6.7			
27	353	1.6	0.2	-1.6	360	1.4	0.0	-1.4	274	6.5	6.5	-0.4	272	21.4	21.4	-0.7	272	38.0	38.0	-1.5	266	39.0	38.9	3.0	275	31.6	31.5	-3.0			
28	329	0.6	0.3	-0.5	293	2.3	2.1	-0.9	268	7.5	7.5	0.3	272	21.2	21.2	-0.8	278	38.3	37.9	-5.3	267	45.1	45.0	2.6	267	28.6	28.6	1.4			
29	37	2.1	-1.3	-1.7	333	1.6	0.7	-1.4	272	9.3	9.3	-0.3	274	23.2	23.2	-1.5	278	35.7	35.4	-4.7	275	45.3	45.1	-4.1	273	31.0	31.0	-1.4			
30	55	2.1	-1.7	-1.2	343	1.0	0.3	-1.0	287	8.7	8.3	-2.5	275	21.0	20.9	-1.9	269	41.5	41.5	0.7	270	47.4	47.4	0.2	280	34.3	33.8	-6.1			
31	104	0.4	-0.4	0.1	266	1.3	1.3	0.1	271	8.5	8.5	-0.1	269	20.6	20.6	0.5	272	39.9	39.9	-1.6	268	51.2	51.2	1.7	269	39.4	39.4	1.0			

Daily Normals of Upper Air Winds (1971-2000)

KARAIKAL

JANUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	43	8.2	-5.6	-6.0	51	6.2	-4.8	-3.9	74	2.6	-2.5	-0.7	82	2.8	-2.8	-0.4	233	3.5	2.8	2.1	213	6.7	3.7	5.6	133	2.5	-1.8	1.7
2	40	8.5	-5.4	-6.5	48	6.4	-4.8	-4.3	77	3.2	-3.1	-0.7	90	3.1	-3.1	0.0	260	4.0	3.9	0.7	226	6.4	4.6	4.5	174	2.9	-0.3	2.9
3	48	8.2	-6.1	-5.5	43	4.9	-3.3	-3.6	51	2.7	-2.1	-1.7	67	2.8	-2.6	-1.1	245	2.1	1.9	0.9	215	6.7	3.8	5.5	153	2.5	-1.1	2.2
4	38	9.4	-5.8	-7.4	44	5.6	-3.9	-4.0	42	2.7	-1.8	-2.0	46	3.2	-2.3	-2.2	230	3.4	2.6	2.2	193	7.9	1.8	7.7	152	1.5	-0.7	1.3
5	41	7.4	-4.9	-5.6	42	7.2	-4.8	-5.3	33	3.3	-1.8	-2.8	110	2.3	-2.2	0.8	235	4.2	3.4	2.4	230	7.0	5.4	4.5	149	3.5	-1.8	3.0
6	36	8.7	-5.1	-7.0	43	6.4	-4.4	-4.7	72	2.0	-1.9	-0.6	126	1.9	-1.5	1.1	221	6.0	3.9	4.5	227	7.4	5.4	5.1	201	5.7	2.0	5.3
7	47	7.4	-5.4	-5.0	61	6.5	-5.7	-3.2	81	1.9	-1.9	-0.3	124	1.8	-1.5	1.0	226	5.0	3.6	3.5	217	9.6	5.8	7.6	179	4.1	-0.1	4.1
8	51	7.0	-5.4	-4.4	67	5.0	-4.6	-2.0	74	2.2	-2.1	-0.6	45	2.0	-1.4	-1.4	221	4.6	3.0	3.5	224	9.6	6.7	6.9	193	2.6	0.6	2.5
9	41	7.7	-5.0	-5.8	54	4.4	-3.6	-2.6	77	2.6	-2.5	-0.6	49	1.1	-0.8	-0.7	227	5.0	3.6	3.4	207	8.1	3.7	7.2	153	0.7	-0.3	0.6
10	52	7.2	-5.7	-4.4	46	5.2	-3.7	-3.6	81	2.4	-2.4	-0.4	81	1.9	-1.9	-0.3	225	5.4	3.8	3.8	217	7.8	4.7	6.2	81	2.5	-2.5	-0.4
11	44	5.8	-4.0	-4.2	42	4.5	-3.0	-3.3	63	1.8	-1.6	-0.8	52	2.3	-1.8	-1.4	252	7.1	6.7	2.2	214	8.5	4.8	7.0	228	2.4	1.8	1.6
12	41	5.8	-3.8	-4.4	45	4.8	-3.4	-3.4	76	1.2	-1.2	-0.3	338	2.4	0.9	-2.2	244	7.9	7.1	3.4	209	8.8	4.2	7.7	121	2.3	-2.0	1.2
13	44	6.7	-4.7	-4.8	63	4.6	-4.1	-2.1	69	3.1	-2.9	-1.1	68	2.7	-2.5	-1.0	249	5.6	5.2	2.0	207	8.0	3.6	7.2	110	3.7	-3.5	1.3
14	48	6.2	-4.6	-4.1	63	6.3	-5.6	-2.9	96	2.7	-2.7	0.3	81	1.2	-1.2	-0.2	236	6.2	5.1	3.5	195	8.5	2.2	8.2	232	1.6	1.3	1.0
15	61	5.1	-4.5	-2.5	65	5.5	-5.0	-2.3	71	2.4	-2.3	-0.8	90	1.0	-1.0	0.0	270	5.9	5.9	0.0	212	7.3	3.8	6.2	188	0.7	0.1	0.7
16	44	5.9	-4.1	-4.2	54	6.0	-4.9	-3.5	91	8.5	-8.5	0.1	143	1.0	-0.6	0.8	252	3.8	3.6	1.2	193	5.9	1.3	5.8	185	1.1	0.1	1.1
17	43	5.7	-3.9	-4.2	61	4.7	-4.1	-2.3	75	3.0	-2.9	-0.8	90	1.5	-1.5	0.0	254	3.5	3.4	1.0	203	6.5	2.5	6.0	135	4.8	-3.4	3.4
18	36	7.7	-4.5	-6.2	51	6.5	-5.1	-4.1	60	3.0	-2.6	-1.5	350	1.1	0.2	-1.1	215	3.7	2.1	3.0	226	6.4	4.6	4.5	124	1.1	-0.9	0.6
19	47	7.3	-5.3	-5.0	39	4.6	-2.9	-3.6	24	1.7	-0.7	-1.6	18	2.3	-0.7	-2.2	249	2.8	2.6	1.0	201	7.4	2.6	6.9	133	3.3	-2.4	2.2
20	44	6.2	-4.3	-4.5	38	5.8	-3.6	-4.6	34	2.9	-1.6	-2.4	17	2.4	-0.7	-2.3	242	3.2	2.8	1.5	211	6.6	3.4	5.6	119	4.6	-4.0	2.2
21	35	5.4	-3.1	-4.4	47	6.0	-4.4	-4.1	50	3.3	-2.5	-2.1	37	4.0	-2.4	-3.2	202	5.2	1.9	4.8	229	5.3	4.0	3.5	155	2.9	-1.2	2.6
22	40	6.0	-3.9	-4.6	56	6.2	-5.1	-3.5	60	3.8	-3.3	-1.9	66	2.4	-2.2	-1.0	232	3.3	2.6	2.0	230	4.5	3.5	2.9	159	2.2	-0.8	2.1
23	48	6.7	-5.0	-4.5	53	6.8	-5.4	-4.1	57	3.3	-2.8	-1.8	45	3.1	-2.2	-2.2	249	3.4	3.2	1.2	203	6.5	2.6	6.0	137	6.2	-4.2	4.5
24	49	8.1	-6.1	-5.3	55	7.6	-6.2	-4.4	54	4.1	-3.3	-2.4	45	1.0	-0.7	-0.7	283	5.9	5.8	-1.3	227	7.6	5.6	5.2	121	6.9	-5.9	3.5
25	47	7.3	-5.3	-5.0	56	7.9	-6.6	-4.4	63	4.2	-3.8	-1.9	360	0.4	0.0	-0.4	284	2.5	2.4	-0.6	202	5.5	2.1	5.1	131	2.0	-1.5	1.3
26	57	8.2	-6.9	-4.4	54	6.7	-5.4	-3.9	30	3.9	-2.0	-3.4	11	1.5	-0.3	-1.5	277	3.2	3.2	-0.4	216	6.4	3.8	5.2	161	3.9	-1.3	3.7
27	48	7.4	-5.5	-5.0	46	7.1	-5.1	-5.0	66	3.2	-2.9	-1.3	40	2.6	-1.7	-2.0	218	5.2	3.2	4.1	205	8.6	3.7	7.8	81	2.6	-2.6	-0.4
28	42	7.0	-4.7	-5.2	49	5.5	-4.2	-3.6	65	3.1	-2.8	-1.3	62	2.1	-1.9	-1.0	235	3.9	3.2	2.2	207	7.5	3.4	6.7	195	2.0	0.5	1.9
29	41	7.6	-5.0	-5.7	44	6.6	-4.6	-4.7	70	4.0	-3.8	-1.4	34	3.2	-1.8	-2.7	251	6.2	5.9	2.0	217	8.7	5.2	7.0	192	2.5	0.5	2.4
30	40	6.2	-4.0	-4.8	49	5.5	-4.2	-3.6	63	3.5	-3.1	-1.6	32	2.6	-1.4	-2.2	236	3.6	3.0	2.0	206	7.2	3.2	6.5	148	2.6	-1.4	2.2
31	53	7.7	-6.2	-4.6	49	6.7	-5.0	-4.4	64	2.8	-2.5	-1.2	19	3.1	-1.0	-2.9	278	3.7	3.7	-0.5	239	5.0	4.3	2.6	125	4.9	-4.0	2.8

Daily Normals of Upper Air Winds (1971-2000)

KARAIKAL

FEBRUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	47	7.2	-5.3	-4.9	58	6.0	-5.1	-3.2	86	3.2	-3.2	-0.2	42	3.1	-2.1	-2.3	243	2.5	2.2	1.1	224	6.9	4.8	5.0	151	4.7	-2.3	4.1
2	41	6.5	-4.2	-4.9	44	5.5	-3.8	-4.0	90	2.4	-2.4	0.0	344	1.5	0.4	-1.4	260	4.6	4.5	0.8	241	6.4	5.6	3.1	238	1.5	1.3	0.8
3	50	6.4	-4.9	-4.1	46	6.0	-4.3	-4.2	8	1.4	-0.2	-1.4	326	1.8	1.0	-1.5	281	4.9	4.8	-0.9	203	7.6	3.0	7.0	301	3.3	2.8	-1.7
4	55	6.5	-5.3	-3.7	46	5.5	-4.0	-3.8	41	1.8	-1.2	-1.4	304	2.7	2.2	-1.5	256	4.0	3.9	1.0	215	6.7	3.8	5.5	323	1.5	0.9	-1.2
5	64	6.4	-5.7	-2.8	48	6.4	-4.8	-4.3	37	2.6	-1.6	-2.1	340	2.3	0.8	-2.2	285	3.4	3.3	-0.9	194	3.7	0.9	3.6	22	1.1	-0.4	-1.0
6	55	5.6	-4.6	-3.2	50	6.0	-4.6	-3.8	63	2.9	-2.6	-1.3	342	0.9	0.3	-0.9	237	4.9	4.1	2.7	231	6.0	4.7	3.8	89	3.9	-3.9	-0.1
7	58	5.5	-4.7	-2.9	60	4.8	-4.1	-2.4	25	1.4	-0.6	-1.3	329	1.7	0.9	-1.5	238	7.4	6.3	3.9	227	3.3	2.4	2.2	138	5.1	-3.4	3.8
8	71	4.2	-4.0	-1.4	50	4.0	-3.1	-2.6	45	0.8	-0.6	-0.6	332	2.1	1.0	-1.9	262	7.8	7.7	1.1	232	6.8	5.3	4.2	130	3.1	-2.4	2.0
9	92	3.4	-3.4	0.1	60	4.3	-3.7	-2.1	13	1.3	-0.3	-1.3	317	3.4	2.3	-2.5	267	8.9	8.9	0.4	239	8.4	7.2	4.4	7	2.5	-0.3	-2.5
10	76	4.0	-3.9	-1.0	48	5.7	-4.2	-3.8	21	2.8	-1.0	-2.6	332	3.2	1.5	-2.8	283	7.2	7.0	-1.6	240	6.4	5.5	3.2	93	2.0	-2.0	0.1
11	51	6.0	-4.7	-3.8	49	6.9	-5.2	-4.6	23	3.3	-1.3	-3.0	2	2.5	-0.1	-2.5	295	6.1	5.5	-2.6	225	10.0	7.0	7.1	118	2.6	-2.3	1.2
12	55	6.0	-4.9	-3.4	49	6.5	-4.9	-4.3	27	3.8	-1.7	-3.4	41	2.9	-1.9	-2.2	311	6.4	4.8	-4.2	209	7.9	3.9	6.9	225	0.4	0.3	0.3
13	50	5.7	-4.4	-3.7	53	5.6	-4.5	-3.4	60	3.2	-2.8	-1.6	64	3.4	-3.1	-1.5	236	2.2	1.8	1.2	192	5.6	1.2	5.5	73	1.0	-1.0	-0.3
14	62	5.7	-5.0	-2.7	46	5.3	-3.8	-3.7	357	1.7	0.1	-1.7	84	1.9	-1.9	-0.2	276	3.9	3.9	-0.4	210	7.3	3.7	6.3	165	2.4	-0.6	2.3
15	56	4.3	-3.6	-2.4	34	4.6	-2.6	-3.8	11	2.5	-0.5	-2.5	67	2.3	-2.1	-0.9	267	3.3	3.3	0.2	223	6.6	4.5	4.8	110	2.7	-2.5	0.9
16	58	4.7	-4.0	-2.5	46	4.7	-3.4	-3.3	45	1.6	-1.1	-1.1	50	2.3	-1.8	-1.5	169	1.5	-0.3	1.5	188	5.5	0.8	5.4	143	2.1	-1.3	1.7
17	56	3.4	-2.8	-1.9	44	3.9	-2.7	-2.8	70	2.9	-2.7	-1.0	14	2.5	-0.6	-2.4	205	3.1	1.3	2.8	209	6.8	3.3	6.0	162	0.9	-0.3	0.9
18	78	2.5	-2.4	-0.5	64	4.6	-4.1	-2.0	80	2.3	-2.3	-0.4	14	2.1	-0.5	-2.0	229	3.0	2.3	2.0	222	5.2	3.5	3.9	309	0.6	0.5	-0.4
19	82	2.8	-2.8	-0.4	67	3.9	-3.6	-1.5	50	2.5	-1.9	-1.6	37	1.5	-0.9	-1.2	280	2.3	2.3	-0.4	204	3.6	1.5	3.3	343	1.0	0.3	-1.0
20	101	2.5	-2.5	0.5	66	4.3	-3.9	-1.7	40	3.0	-1.9	-2.3	9	1.9	-0.3	-1.9	283	0.9	0.9	-0.2	184	4.7	0.3	4.7	95	2.1	-2.1	0.2
21	110	2.3	-2.2	0.8	62	4.4	-3.9	-2.1	36	3.2	-1.9	-2.6	360	2.3	0.0	-2.3	268	3.3	3.3	0.1	242	5.3	4.7	2.5	291	1.7	1.6	-0.6
22	94	3.2	-3.2	0.2	60	3.6	-3.1	-1.8	2	2.4	-0.1	-2.4	39	2.7	-1.7	-2.1	294	4.4	4.0	-1.8	219	5.6	3.5	4.4	250	1.2	1.1	0.4
23	83	4.0	-4.0	-0.5	73	4.4	-4.2	-1.3	49	2.1	-1.6	-1.4	56	1.4	-1.2	-0.8	252	2.8	2.7	0.9	233	3.0	2.4	1.8	124	1.1	-0.9	0.6
24	72	5.1	-4.8	-1.6	57	4.2	-3.5	-2.3	51	2.1	-1.6	-1.3	90	1.1	-1.1	0.0	254	1.9	1.8	0.5	229	6.0	4.5	3.9	94	1.5	-1.5	0.1
25	56	3.6	-3.0	-2.0	55	3.7	-3.0	-2.1	57	4.6	-3.9	-2.5	23	1.5	-0.6	-1.4	257	4.7	4.6	1.1	251	5.5	5.2	1.8	72	0.9	-0.9	-0.3
26	54	4.3	-3.5	-2.5	58	5.1	-4.3	-2.7	17	3.8	-1.1	-3.6	54	0.9	-0.7	-0.5	259	5.2	5.1	1.0	246	6.9	6.3	2.8	97	2.6	-2.6	0.3
27	55	5.0	-4.1	-2.9	68	5.7	-5.3	-2.1	41	4.5	-3.0	-3.4	117	0.2	-0.2	0.1	247	8.2	7.5	3.2	245	7.9	7.2	3.3	225	0.3	0.2	0.2
28	63	4.8	-4.3	-2.2	57	5.7	-4.8	-3.1	57	5.1	-4.3	-2.8	8	1.4	-0.2	-1.4	259	5.1	5.0	1.0	239	4.9	4.2	2.5	170	2.7	-0.5	2.7
29	46	6.3	-4.5	-4.4	62	4.3	-3.8	-2.0	63	7.9	-7.0	-3.6	39	4.5	-2.8	-3.5	226	9.6	6.9	6.7	239	7.6	6.5	3.9	234	5.4	4.4	3.2

Daily Normals of Upper Air Winds (1971-2000)

KARAIKAL

MARCH

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	65	6.3	-5.7	-2.7	67	6.1	-5.6	-2.4	41	5.3	-3.5	-4.0	11	1.5	-0.3	-1.5	264	4.0	4.0	0.4	229	6.9	5.2	4.5	130	3.3	-2.5	2.1			
2	66	6.0	-5.5	-2.5	60	6.9	-6.0	-3.5	43	5.0	-3.4	-3.6	21	1.4	-0.5	-1.3	285	4.9	4.7	-1.3	216	7.7	4.5	6.2	170	2.3	-0.4	2.3			
3	65	5.5	-5.0	-2.3	65	6.4	-5.8	-2.7	51	4.8	-3.7	-3.0	360	1.3	0.0	-1.3	267	3.9	3.9	0.2	223	8.9	6.1	6.5	290	2.3	2.2	-0.8			
4	73	4.7	-4.5	-1.4	65	5.1	-4.6	-2.1	40	3.8	-2.4	-2.9	28	1.7	-0.8	-1.5	274	3.9	3.9	-0.3	228	7.6	5.6	5.1	133	2.6	-1.9	1.8			
5	67	4.3	-4.0	-1.7	65	4.7	-4.3	-2.0	53	3.6	-2.9	-2.2	47	2.2	-1.6	-1.5	232	2.8	2.2	1.7	233	7.4	5.9	4.5	255	1.6	1.5	0.4			
6	76	3.3	-3.2	-0.8	70	3.7	-3.5	-1.3	57	3.5	-2.9	-1.9	54	3.2	-2.6	-1.9	235	4.4	3.6	2.5	231	8.5	6.6	5.4	123	2.4	-2.0	1.3			
7	63	3.4	-3.0	-1.5	65	5.3	-4.8	-2.2	50	3.3	-2.5	-2.1	73	2.7	-2.6	-0.8	239	4.5	3.9	2.3	230	8.9	6.8	5.7	153	0.4	-0.2	0.4			
8	95	3.7	-3.7	0.3	72	3.8	-3.6	-1.2	46	4.7	-3.4	-3.3	32	1.5	-0.8	-1.3	259	6.4	6.3	1.2	233	7.4	5.9	4.4	185	2.4	0.2	2.4			
9	87	4.5	-4.5	-0.2	49	4.5	-3.4	-3.0	49	4.6	-3.5	-3.0	25	2.6	-1.1	-2.4	263	5.0	5.0	0.6	204	4.9	2.0	4.5	221	1.8	1.2	1.4			
10	97	4.2	-4.2	0.5	72	5.2	-5.0	-1.6	60	4.2	-3.6	-2.1	37	1.5	-0.9	-1.2	254	5.6	5.4	1.5	236	7.8	6.5	4.4	107	1.4	-1.3	0.4			
11	110	3.0	-2.8	1.0	73	3.4	-3.3	-1.0	57	4.3	-3.6	-2.3	305	1.2	1.0	-0.7	260	3.4	3.3	0.6	237	9.8	8.2	5.3	169	2.0	-0.4	2.0			
12	107	3.8	-3.6	1.1	60	3.9	-3.4	-2.0	32	5.1	-2.7	-4.3	326	1.8	1.0	-1.5	273	5.0	5.0	-0.3	241	5.2	4.6	2.5	259	1.0	1.0	0.2			
13	128	2.9	-2.3	1.8	68	5.1	-4.7	-1.9	36	4.8	-2.8	-3.9	360	1.5	0.0	-1.5	270	7.2	7.2	0.0	241	7.3	6.4	3.6	360	0.1	0.0	-0.1			
14	99	2.5	-2.5	0.4	77	5.1	-5.0	-1.2	53	6.4	-5.1	-3.9	15	3.5	-0.9	-3.4	257	5.9	5.8	1.3	229	7.7	5.8	5.1	99	0.6	-0.6	0.1			
15	96	3.6	-3.6	0.4	68	5.4	-5.0	-2.0	54	6.6	-5.3	-3.9	42	3.6	-2.4	-2.7	269	4.4	4.4	0.1	246	9.4	8.6	3.8	111	5.6	-5.2	2.0			
16	108	1.9	-1.8	0.6	72	4.4	-4.2	-1.4	62	6.8	-6.0	-3.2	70	3.3	-3.1	-1.1	243	5.9	5.2	2.7	247	9.0	8.3	3.5	109	3.4	-3.2	1.1			
17	142	1.6	-1.0	1.3	61	3.3	-2.9	-1.6	57	5.7	-4.8	-3.1	42	2.8	-1.9	-2.1	240	4.2	3.6	2.1	237	10.0	8.4	5.5	153	0.7	-0.3	0.6			
18	106	2.6	-2.5	0.7	70	3.5	-3.3	-1.2	51	6.5	-5.1	-4.1	66	2.7	-2.5	-1.1	239	4.1	3.5	2.1	226	8.4	6.1	5.8	138	3.8	-2.5	2.8			
19	93	3.8	-3.8	0.2	70	4.4	-4.1	-1.5	48	6.7	-5.0	-4.5	39	2.2	-1.4	-1.7	229	5.7	4.3	3.7	248	4.8	4.5	1.8	144	1.4	-0.8	1.1			
20	127	3.5	-2.8	2.1	92	3.6	-3.6	0.1	44	8.4	-5.8	-6.1	29	2.1	-1.0	-1.8	231	4.5	3.5	2.8	223	5.3	3.6	3.9	102	4.8	-4.7	1.0			
21	114	2.4	-2.2	1.0	65	1.9	-1.7	-0.8	47	7.5	-5.5	-5.1	56	3.6	-3.0	-2.0	268	5.2	5.2	0.2	224	5.7	3.9	4.1	76	4.5	-4.4	-1.1			
22	88	2.3	-2.3	-0.1	65	4.0	-3.6	-1.7	54	6.9	-5.6	-4.1	46	3.2	-2.3	-2.2	251	3.4	3.2	1.1	223	7.1	4.9	5.2	97	2.5	-2.5	0.3			
23	151	2.6	-1.3	2.3	90	2.9	-2.9	0.0	56	5.5	-4.6	-3.1	44	2.8	-1.9	-2.0	249	4.3	4.0	1.5	230	6.9	5.3	4.4	110	3.3	-3.1	1.1			
24	145	1.9	-1.1	1.6	81	1.9	-1.9	-0.3	49	6.0	-4.5	-3.9	77	3.2	-3.1	-0.7	243	3.6	3.2	1.6	222	8.4	5.6	6.3	94	2.7	-2.7	0.2			
25	176	1.6	-0.1	1.6	58	2.5	-2.1	-1.3	53	8.4	-6.7	-5.1	88	3.3	-3.3	-0.1	248	5.1	4.7	1.9	224	7.1	4.9	5.1	286	1.9	1.8	-0.5			
26	136	3.3	-2.3	2.4	80	2.7	-2.7	-0.5	53	6.8	-5.4	-4.1	36	1.7	-1.0	-1.4	251	6.9	6.5	2.2	238	6.6	5.6	3.5	335	1.9	0.8	-1.7			
27	122	1.9	-1.6	1.0	83	2.5	-2.5	-0.3	51	6.2	-4.8	-3.9	63	3.4	-3.0	-1.5	260	5.3	5.2	0.9	259	4.7	4.6	0.9	76	2.5	-2.4	-0.6			
28	99	3.0	-3.0	0.5	70	4.0	-3.8	-1.4	51	6.9	-5.4	-4.3	67	3.3	-3.0	-1.3	283	3.1	3.0	-0.7	256	4.6	4.5	1.1	95	1.1	-1.1	0.1			
29	135	1.6	-1.1	1.1	77	3.2	-3.1	-0.7	48	6.4	-4.8	-4.3	57	5.0	-4.2	-2.7	293	2.3	2.1	-0.9	233	3.4	2.7	2.0	298	1.9	1.7	-0.9			
30	112	1.8	-1.7	0.7	69	4.4	-4.1	-1.6	50	6.8	-5.2	-4.4	53	3.8	-3.0	-2.3	234	2.9	2.3	1.7	222	5.1	3.4	3.8	249	1.9	1.8	0.7			
31	100	1.7	-1.7	0.3	41	3.2	-2.1	-2.4	44	6.6	-4.6	-4.8	50	2.3	-1.8	-1.5	210	4.8	2.4	4.1	235	7.5	6.1	4.3	294	1.7	1.6	-0.7			

Daily Normals of Upper Air Winds (1971-2000)

KARAIKAL

APRIL

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	117	1.8	-1.6	0.8	77	1.8	-1.8	-0.4	51	8.0	-6.2	-5.0	66	4.8	-4.4	-2.0	233	4.0	3.2	2.4	224	6.1	4.2	4.4	62	1.7	-1.5	-0.8			
2	109	4.0	-3.8	1.3	87	2.1	-2.1	-0.1	57	7.7	-6.5	-4.2	108	2.5	-2.4	0.8	221	2.1	1.4	1.6	212	8.3	4.4	7.0	159	3.9	-1.4	3.6			
3	116	3.2	-2.9	1.4	69	2.6	-2.4	-0.9	61	5.8	-5.1	-2.8	57	1.7	-1.4	-0.9	217	6.5	3.9	5.2	214	10.2	5.7	8.5	198	0.3	0.1	0.3			
4	107	4.4	-4.2	1.3	78	1.9	-1.9	-0.4	59	4.9	-4.2	-2.5	90	0.5	-0.5	0.0	247	5.8	5.3	2.3	222	6.7	4.5	5.0	110	4.1	-3.9	1.4			
5	124	3.2	-2.7	1.8	88	2.5	-2.5	-0.1	49	5.6	-4.2	-3.7	88	2.3	-2.3	-0.1	258	5.1	5.0	1.1	205	8.9	3.7	8.1	138	1.5	-1.0	1.1			
6	108	2.6	-2.5	0.8	77	2.6	-2.5	-0.6	54	6.3	-5.1	-3.7	55	2.9	-2.4	-1.7	251	3.6	3.4	1.2	216	6.6	3.9	5.3	152	2.7	-1.3	2.4			
7	128	1.6	-1.3	1.0	79	2.5	-2.5	-0.5	53	6.6	-5.3	-4.0	67	3.0	-2.8	-1.2	265	1.1	1.1	0.1	226	5.2	3.7	3.6	83	3.2	-3.2	-0.4			
8	174	1.8	-0.2	1.8	66	3.6	-3.3	-1.5	44	7.1	-4.9	-5.1	61	3.8	-3.3	-1.8	191	0.5	0.1	0.5	240	3.2	2.8	1.6	117	3.3	-2.9	1.5			
9	168	3.4	-0.7	3.3	50	1.6	-1.2	-1.0	45	7.5	-5.3	-5.3	76	3.4	-3.3	-0.8	187	0.8	0.1	0.8	217	5.0	3.0	4.0	112	1.8	-1.7	0.7			
10	170	2.8	-0.5	2.8	55	1.6	-1.3	-0.9	52	7.4	-5.8	-4.6	55	4.0	-3.3	-2.3	315	0.7	0.5	-0.5	218	3.6	2.2	2.8	106	2.5	-2.4	0.7			
11	171	3.0	-0.5	3.0	57	1.7	-1.4	-0.9	48	6.2	-4.6	-4.2	67	4.0	-3.7	-1.6	240	0.8	0.7	0.4	204	5.2	2.1	4.8	134	4.9	-3.5	3.4			
12	160	1.5	-0.5	1.4	73	1.7	-1.6	-0.5	49	6.5	-4.9	-4.2	73	4.7	-4.5	-1.4	135	1.4	-1.0	1.0	179	6.9	-0.1	6.9	147	3.3	-1.8	2.8			
13	180	3.5	0.0	3.5	153	0.7	-0.3	0.6	56	5.3	-4.4	-3.0	72	3.6	-3.4	-1.1	158	0.5	-0.2	0.5	186	8.9	1.0	8.8	148	1.5	-0.8	1.3			
14	157	3.0	-1.2	2.8	18	0.3	-0.1	-0.3	47	6.8	-5.0	-4.6	68	3.1	-2.9	-1.2	243	2.7	2.4	1.2	207	5.6	2.6	5.0	101	3.3	-3.2	0.6			
15	162	3.8	-1.2	3.6	81	0.6	-0.6	-0.1	52	6.3	-5.0	-3.9	68	4.0	-3.7	-1.5	251	3.4	3.2	1.1	208	6.8	3.2	6.0	124	2.7	-2.2	1.5			
16	154	2.8	-1.2	2.5	29	1.3	-0.6	-1.1	59	7.4	-6.3	-3.8	70	3.2	-3.0	-1.1	239	3.3	2.8	1.7	216	6.9	4.1	5.6	104	2.9	-2.8	0.7			
17	186	2.8	0.3	2.8	50	1.6	-1.2	-1.0	53	7.5	-6.0	-4.5	111	1.4	-1.3	0.5	242	5.0	4.4	2.3	210	9.5	4.8	8.2	106	2.6	-2.5	0.7			
18	184	3.1	0.2	3.1	42	1.2	-0.8	-0.9	50	7.6	-5.8	-4.9	81	1.9	-1.9	-0.3	218	7.3	4.5	5.7	199	10.9	3.5	10.3	186	3.0	0.3	3.0			
19	129	1.3	-1.0	0.8	61	1.3	-1.1	-0.6	53	6.7	-5.4	-4.0	81	2.0	-2.0	-0.3	234	5.3	4.3	3.1	206	10.7	4.7	9.6	123	5.7	-4.8	3.1			
20	161	1.8	-0.6	1.7	61	1.0	-0.9	-0.5	46	7.6	-5.4	-5.3	86	2.6	-2.6	-0.2	249	5.8	5.4	2.1	204	11.5	4.7	10.5	149	6.1	-3.1	5.2			
21	187	3.8	0.5	3.8	277	0.8	0.8	-0.1	40	8.7	-5.6	-6.6	113	2.3	-2.1	0.9	238	7.7	6.5	4.1	220	10.4	6.7	7.9	225	0.7	0.5	0.5			
22	207	0.7	0.3	0.6	340	1.5	0.5	-1.4	53	6.6	-5.3	-4.0	171	0.6	-0.1	0.6	249	4.4	4.1	1.6	229	10.1	7.7	6.6	133	2.3	-1.7	1.6			
23	187	2.5	0.3	2.5	349	1.5	0.3	-1.5	45	7.5	-5.3	-5.3	9	1.8	-0.3	-1.8	257	4.6	4.5	1.0	228	5.9	4.4	4.0	75	4.8	-4.6	-1.2			
24	165	3.1	-0.8	3.0	351	0.6	0.1	-0.6	50	6.4	-4.9	-4.1	16	1.5	-0.4	-1.4	275	7.6	7.6	-0.6	248	6.1	5.7	2.3	99	4.3	-4.2	0.7			
25	178	2.4	-0.1	2.4	322	1.8	1.1	-1.4	40	7.7	-4.9	-5.9	292	1.1	1.0	-0.4	261	5.7	5.6	0.9	229	6.2	4.7	4.1	100	2.8	-2.8	0.5			
26	184	3.1	0.2	3.1	24	1.0	-0.4	-0.9	53	8.3	-6.6	-5.0	16	1.8	-0.5	-1.7	252	4.7	4.5	1.5	226	4.2	3.0	2.9	83	3.8	-3.8	-0.5			
27	191	2.6	0.5	2.6	351	1.3	0.2	-1.3	54	6.1	-4.9	-3.6	27	1.3	-0.6	-1.2	284	3.4	3.3	-0.8	233	5.0	4.0	3.0	91	5.8	-5.8	0.1			
28	192	2.9	0.6	2.8	333	1.6	0.7	-1.4	43	7.0	-4.8	-5.1	62	1.7	-1.5	-0.8	261	4.7	4.6	0.7	206	6.2	2.7	5.6	99	5.6	-5.5	0.9			
29	210	2.4	1.2	2.1	323	1.5	0.9	-1.2	42	6.2	-4.2	-4.6	8	3.0	-0.4	-3.0	264	3.6	3.6	0.4	221	5.3	3.5	4.0	89	7.8	-7.8	-0.2			
30	193	2.6	0.6	2.5	303	2.7	2.3	-1.5	39	7.7	-4.8	-6.0	15	3.4	-0.9	-3.3	255	3.1	3.0	0.8	195	4.3	1.1	4.2	84	6.1	-6.1	-0.6			

Daily Normals of Upper Air Winds (1971-2000)

KARAIKAL

MAY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	219	2.7	1.7	2.1	310	1.7	1.3	-1.1	47	5.7	-4.2	-3.9	6	1.9	-0.2	-1.9	207	2.5	1.1	2.2	184	4.0	0.3	4.0	100	7.4	-7.3	1.3			
2	197	2.7	0.8	2.6	337	1.5	0.6	-1.4	46	6.6	-4.7	-4.6	23	2.3	-0.9	-2.1	278	2.8	2.8	-0.4	176	4.7	-0.3	4.7	96	5.4	-5.4	0.6			
3	184	2.6	0.2	2.6	356	1.5	0.1	-1.5	39	5.8	-3.7	-4.5	42	3.9	-2.6	-2.9	288	1.3	1.2	-0.4	159	1.9	-0.7	1.8	97	7.6	-7.5	0.9			
4	129	3.8	-3.0	2.4	315	2.0	1.4	-1.4	40	5.1	-3.3	-3.9	57	2.4	-2.0	-1.3	279	1.2	1.2	-0.2	167	4.1	-0.9	4.0	93	6.2	-6.2	0.3			
5	197	2.8	0.8	2.7	321	1.9	1.2	-1.5	57	5.6	-4.7	-3.1	58	1.5	-1.3	-0.8	267	1.8	1.8	0.1	156	5.6	-2.3	5.1	91	9.1	-9.1	0.2			
6	202	3.5	1.3	3.3	317	2.1	1.4	-1.5	52	4.8	-3.8	-3.0	45	0.8	-0.6	-0.6	248	1.1	1.0	0.4	171	3.6	-0.6	3.6	111	9.7	-9.1	3.5			
7	199	3.7	1.2	3.5	331	3.3	1.6	-2.9	42	6.2	-4.2	-4.6	8	2.2	-0.3	-2.2	245	2.1	1.9	0.9	167	4.0	-0.9	3.9	117	9.8	-8.7	4.5			
8	212	4.6	2.4	3.9	280	1.7	1.7	-0.3	48	5.9	-4.4	-4.0	6	1.0	-0.1	-1.0	288	0.3	0.3	-0.1	118	4.1	-3.6	1.9	103	7.8	-7.6	1.7			
9	214	4.3	2.4	3.6	313	2.1	1.5	-1.4	29	5.2	-2.5	-4.6	332	2.4	1.1	-2.1	187	0.8	0.1	0.8	153	3.8	-1.7	3.4	94	7.9	-7.9	0.5			
10	216	4.4	2.6	3.6	304	2.3	1.9	-1.3	52	4.3	-3.4	-2.7	278	1.4	1.4	-0.2	197	2.1	0.6	2.0	151	4.5	-2.2	3.9	87	9.9	-9.9	-0.6			
11	205	4.0	1.7	3.6	308	2.3	1.8	-1.4	40	5.0	-3.2	-3.8	23	1.3	-0.5	-1.2	221	2.0	1.3	1.5	169	6.0	-1.2	5.9	98	8.8	-8.7	1.3			
12	226	3.9	2.8	2.7	283	1.8	1.8	-0.4	41	4.4	-2.9	-3.3	35	1.9	-1.1	-1.6	175	3.3	-0.3	3.3	153	6.8	-3.1	6.0	102	11.6	-11.3	2.5			
13	215	2.4	1.4	2.0	297	1.6	1.4	-0.7	37	4.6	-2.8	-3.7	15	1.6	-0.4	-1.5	203	3.6	1.4	3.3	126	6.1	-4.9	3.6	91	10.4	-10.4	0.2			
14	211	3.3	1.7	2.8	292	2.7	2.5	-1.0	35	4.4	-2.5	-3.6	49	0.9	-0.7	-0.6	128	1.1	-0.9	0.7	112	6.4	-5.9	2.4	97	13.0	-12.9	1.6			
15	236	5.8	4.8	3.2	296	3.0	2.7	-1.3	48	2.8	-2.1	-1.9	13	0.9	-0.2	-0.9	133	1.6	-1.2	1.1	94	6.5	-6.5	0.5	96	13.0	-12.9	1.3			
16	227	6.7	4.9	4.5	296	3.7	3.3	-1.6	54	4.3	-3.5	-2.5	28	1.9	-0.9	-1.7	115	3.3	-3.0	1.4	111	5.5	-5.1	2.0	99	13.4	-13.2	2.1			
17	248	6.9	6.4	2.6	287	5.2	5.0	-1.5	25	4.1	-1.7	-3.7	28	2.6	-1.2	-2.3	8	0.7	-0.1	-0.7	101	5.8	-5.7	1.1	95	10.0	-10.0	0.8			
18	242	8.2	7.2	3.9	277	4.6	4.6	-0.6	353	3.9	0.5	-3.9	318	2.5	1.7	-1.9	118	1.7	-1.5	0.8	105	5.4	-5.2	1.4	100	9.6	-9.4	1.7			
19	233	6.2	5.0	3.7	281	5.4	5.3	-1.0	5	3.4	-0.3	-3.4	342	3.2	1.0	-3.0	84	1.0	-1.0	-0.1	123	7.2	-6.1	3.9	90	14.6	-14.6	0.0			
20	223	4.9	3.3	3.6	281	5.3	5.2	-1.0	11	4.9	-0.9	-4.8	345	2.8	0.7	-2.7	170	1.1	-0.2	1.1	127	7.2	-5.8	4.3	96	15.1	-15.0	1.7			
21	234	4.6	3.7	2.7	293	4.4	4.1	-1.7	18	2.6	-0.8	-2.5	342	1.9	0.6	-1.8	139	2.0	-1.3	1.5	116	5.9	-5.3	2.6	95	14.4	-14.3	1.3			
22	222	6.7	4.5	5.0	277	5.0	5.0	-0.6	12	3.0	-0.6	-2.9	301	2.6	2.2	-1.3	158	0.5	-0.2	0.5	108	6.2	-5.9	1.9	95	13.2	-13.1	1.2			
23	238	6.2	5.3	3.3	278	4.1	4.1	-0.6	14	3.3	-0.8	-3.2	299	2.9	2.5	-1.4	72	0.3	-0.3	-0.1	112	8.4	-7.8	3.2	91	12.2	-12.2	0.3			
24	212	4.9	2.6	4.2	279	4.9	4.8	-0.8	12	3.0	-0.6	-2.9	329	3.9	2.0	-3.3	173	2.4	-0.3	2.4	112	11.8	-10.9	4.5	96	16.8	-16.7	1.8			
25	226	5.7	4.1	3.9	277	4.7	4.7	-0.6	13	2.8	-0.6	-2.7	324	2.2	1.3	-1.8	190	1.7	0.3	1.7	99	7.3	-7.2	1.1	92	17.2	-17.2	0.5			
26	223	5.2	3.5	3.8	273	4.2	4.2	-0.2	17	2.1	-0.6	-2.0	5	2.1	-0.2	-2.1	127	2.0	-1.6	1.2	105	9.0	-8.7	2.4	96	19.2	-19.1	2.1			
27	226	6.7	4.8	4.7	274	5.3	5.3	-0.4	350	3.6	0.6	-3.5	63	0.9	-0.8	-0.4	103	3.1	-3.0	0.7	92	7.1	-7.1	0.2	97	15.4	-15.3	1.8			
28	232	7.2	5.7	4.4	277	5.6	5.6	-0.7	38	3.7	-2.3	-2.9	360	1.9	0.0	-1.9	108	2.2	-2.1	0.7	103	8.2	-8.0	1.8	100	17.5	-17.2	3.0			
29	237	6.3	5.3	3.4	287	5.5	5.3	-1.6	14	4.0	-1.0	-3.9	332	2.6	1.2	-2.3	117	0.7	-0.6	0.3	102	8.2	-8.0	1.7	94	14.8	-14.8	1.1			
30	218	4.3	2.7	3.4	274	4.8	4.8	-0.3	27	3.0	-1.4	-2.7	7	2.6	-0.3	-2.6	82	0.7	-0.7	-0.1	102	7.0	-6.8	1.5	98	16.5	-16.4	2.2			
31	222	6.7	4.5	5.0	274	4.6	4.6	-0.3	2	2.5	-0.1	-2.5	18	2.5	-0.8	-2.4	98	1.5	-1.5	0.2	93	5.8	-5.8	0.3	96	17.2	-17.1	1.8			

Daily Normals of Upper Air Winds (1971-2000)

186

KARAIKAL

JUNE

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	238	7.5	6.3	4.0	265	5.4	5.4	0.5	335	1.9	0.8	-1.7	326	2.3	1.3	-1.9	100	1.7	-1.7	0.3	96	7.9	-7.9	0.8	95	19.7	-19.6	1.7			
2	237	7.2	6.1	3.9	270	6.8	6.8	0.0	299	2.1	1.8	-1.0	339	1.7	0.6	-1.6	88	2.6	-2.6	-0.1	94	10.2	-10.2	0.7	91	20.0	-20.0	0.3			
3	242	8.4	7.4	4.0	272	8.0	8.0	-0.3	297	3.0	2.7	-1.4	298	2.6	2.3	-1.2	98	1.5	-1.5	0.2	99	12.0	-11.8	1.9	99	22.9	-22.6	3.7			
4	221	7.6	5.0	5.7	265	7.6	7.6	0.6	299	2.1	1.8	-1.0	309	1.9	1.5	-1.2	122	0.9	-0.8	0.5	82	9.9	-9.8	-1.3	94	20.5	-20.4	1.5			
5	229	7.2	5.5	4.7	272	8.0	8.0	-0.3	286	3.6	3.5	-1.0	266	2.6	2.6	0.2	86	3.9	-3.9	-0.3	86	12.2	-12.2	-0.8	92	18.4	-18.4	0.8			
6	225	6.4	4.5	4.5	268	7.8	7.8	0.3	289	4.2	4.0	-1.4	250	3.2	3.0	1.1	101	3.1	-3.0	0.6	87	12.9	-12.9	-0.7	93	23.9	-23.9	1.1			
7	229	8.4	6.4	5.5	270	8.4	8.4	0.0	288	3.8	3.6	-1.2	290	2.0	1.9	-0.7	76	3.4	-3.3	-0.8	98	12.3	-12.2	1.7	85	21.6	-21.5	-2.0			
8	229	6.4	4.8	4.2	270	7.5	7.5	0.0	297	3.3	2.9	-1.5	294	1.7	1.6	-0.7	81	3.7	-3.7	-0.6	86	13.6	-13.6	-0.9	89	24.9	-24.9	-0.6			
9	232	7.6	6.0	4.7	266	7.8	7.8	0.5	294	5.5	5.0	-2.2	275	2.5	2.5	-0.2	82	6.3	-6.2	-0.9	83	16.0	-15.9	-1.9	91	23.9	-23.9	0.4			
10	244	5.5	5.0	2.4	277	6.5	6.5	-0.8	286	6.9	6.6	-1.9	284	3.4	3.3	-0.8	77	4.8	-4.7	-1.1	90	16.2	-16.2	0.1	85	24.1	-24.0	-2.2			
11	242	7.5	6.6	3.5	276	8.0	8.0	-0.8	292	8.7	8.1	-3.2	284	3.3	3.2	-0.8	80	2.8	-2.8	-0.5	89	18.4	-18.4	-0.3	86	23.2	-23.1	-1.7			
12	250	8.4	7.9	2.9	273	9.2	9.2	-0.5	289	8.2	7.7	-2.7	274	5.4	5.4	-0.4	58	3.6	-3.1	-1.9	81	17.1	-16.9	-2.7	88	25.5	-25.5	-0.7			
13	254	9.6	9.2	2.7	271	9.1	9.1	-0.2	286	8.5	8.2	-2.3	268	6.5	6.5	0.2	47	1.8	-1.3	-1.2	81	17.7	-17.5	-2.8	91	23.6	-23.6	0.6			
14	258	10.7	10.5	2.2	264	10.3	10.3	1.0	274	9.5	9.5	-0.7	274	4.1	4.1	-0.3	104	5.7	-5.5	1.4	80	18.1	-17.8	-3.2	91	28.9	-28.9	0.3			
15	240	10.0	8.7	5.0	265	11.3	11.3	1.0	278	9.4	9.3	-1.3	255	4.6	4.4	1.2	94	2.7	-2.7	0.2	80	17.1	-16.9	-2.9	89	26.4	-26.4	-0.4			
16	243	7.6	6.8	3.4	268	11.0	11.0	0.4	278	12.0	11.9	-1.6	252	5.9	5.6	1.8	80	4.1	-4.0	-0.7	85	19.0	-18.9	-1.8	85	24.8	-24.7	-2.3			
17	245	7.7	7.0	3.3	268	11.0	11.0	0.3	281	11.2	11.0	-2.2	274	6.7	6.7	-0.5	93	3.8	-3.8	0.2	84	20.4	-20.3	-2.0	89	26.9	-26.9	-0.3			
18	240	9.5	8.2	4.8	269	11.7	11.7	0.3	277	12.4	12.3	-1.6	274	6.5	6.5	-0.5	82	4.4	-4.4	-0.6	82	21.1	-20.9	-2.9	91	28.4	-28.4	0.5			
19	242	8.6	7.6	4.0	269	10.3	10.3	0.2	283	11.4	11.1	-2.5	288	5.1	4.8	-1.6	95	6.0	-6.0	0.5	82	21.5	-21.3	-2.9	85	25.9	-25.8	-2.2			
20	235	8.2	6.7	4.7	268	11.1	11.1	0.3	287	9.9	9.5	-2.9	272	6.6	6.6	-0.2	82	4.3	-4.3	-0.6	80	21.2	-20.9	-3.8	94	24.4	-24.3	1.8			
21	239	9.0	7.7	4.7	268	10.1	10.1	0.4	280	10.1	10.0	-1.7	276	6.0	6.0	-0.6	87	6.7	-6.7	-0.3	85	24.2	-24.1	-2.3	93	27.0	-27.0	1.2			
22	251	8.0	7.6	2.6	271	9.9	9.9	-0.1	284	9.7	9.4	-2.4	266	6.2	6.2	0.4	91	8.9	-8.9	0.1	84	25.0	-24.9	-2.7	80	28.4	-28.0	-4.7			
23	243	9.0	8.0	4.1	264	11.0	10.9	1.1	278	11.0	10.9	-1.6	277	6.1	6.1	-0.7	99	3.6	-3.6	0.6	83	21.4	-21.3	-2.5	88	29.7	-29.7	-0.8			
24	237	7.4	6.2	4.0	269	10.2	10.2	0.1	279	10.6	10.5	-1.7	267	5.1	5.1	0.3	76	6.2	-6.0	-1.5	85	25.2	-25.1	-2.0	89	29.7	-29.7	-0.6			
25	240	6.2	5.4	3.1	272	11.1	11.1	-0.3	280	10.1	10.0	-1.7	274	5.8	5.8	-0.4	80	5.3	-5.2	-0.9	88	23.1	-23.1	-1.0	92	31.9	-31.9	1.2			
26	237	6.8	5.7	3.7	263	9.3	9.2	1.1	283	11.1	10.8	-2.4	266	5.1	5.1	0.4	108	6.9	-6.6	2.1	82	22.9	-22.7	-3.1	92	27.6	-27.6	0.8			
27	244	7.0	6.3	3.1	264	9.8	9.7	1.1	273	10.9	10.9	-0.5	266	6.4	6.4	0.4	94	5.7	-5.7	0.4	74	22.4	-21.6	-6.0	88	30.3	-30.3	-1.1			
28	240	8.4	7.3	4.2	267	10.2	10.2	0.5	277	10.8	10.7	-1.3	262	6.9	6.8	0.9	93	7.5	-7.5	0.4	84	25.6	-25.5	-2.6	88	26.5	-26.5	-1.1			
29	244	9.3	8.3	4.1	266	10.3	10.3	0.7	272	10.7	10.7	-0.4	263	5.0	5.0	0.6	95	5.7	-5.7	0.5	82	21.9	-21.7	-3.1	86	27.4	-27.3	-1.7			
30	246	9.9	9.0	4.1	267	10.0	10.0	0.5	273	9.7	9.7	-0.5	256	4.2	4.1	1.0	91	6.8	-6.8	0.1	83	21.8	-21.6	-2.6	85	26.3	-26.2	-2.2			

Daily Normals of Upper Air Winds (1971-2000)

KARAIKAL

JULY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	239	7.4	6.4	3.8	269	8.8	8.8	0.2	276	9.9	9.8	-1.0	262	3.4	3.4	0.5	88	7.4	-7.4	-0.3	83	24.2	-24.0	-2.8	90	33.0	-33.0	0.0
2	258	9.0	8.8	1.8	269	8.7	8.7	0.2	281	9.3	9.1	-1.7	264	3.1	3.1	0.3	99	7.4	-7.3	1.1	83	23.3	-23.1	-2.8	91	31.3	-31.3	0.8
3	245	4.5	4.1	1.9	277	7.9	7.8	-0.9	285	8.3	8.0	-2.2	269	4.0	4.0	0.1	103	9.3	-9.1	2.1	82	25.3	-25.0	-3.7	86	29.4	-29.3	-1.9
4	217	6.4	3.8	5.1	263	8.0	7.9	1.0	274	6.1	6.1	-0.4	277	1.7	1.7	-0.2	100	9.3	-9.2	1.6	83	24.7	-24.5	-2.8	87	31.1	-31.1	-1.5
5	244	6.7	6.0	2.9	271	6.7	6.7	-0.1	283	7.3	7.1	-1.6	266	3.1	3.1	0.2	83	7.8	-7.7	-1.0	87	24.7	-24.7	-1.1	90	29.7	-29.7	-0.1
6	238	7.3	6.2	3.9	267	8.5	8.5	0.4	278	7.0	6.9	-1.0	267	4.0	4.0	0.2	89	8.5	-8.5	-0.2	85	23.5	-23.4	-2.1	95	27.3	-27.2	2.4
7	239	7.6	6.5	3.9	269	9.4	9.4	0.2	280	8.5	8.4	-1.5	276	4.1	4.1	-0.4	80	8.0	-7.9	-1.4	80	22.4	-22.1	-3.9	89	31.8	-31.8	-0.5
8	250	7.7	7.3	2.6	266	7.9	7.9	0.6	280	7.5	7.4	-1.3	278	2.8	2.8	-0.4	94	7.7	-7.7	0.6	83	22.3	-22.1	-2.6	88	28.4	-28.4	-1.2
9	240	7.3	6.3	3.6	269	8.7	8.7	0.1	284	7.7	7.5	-1.9	260	4.1	4.0	0.7	90	7.5	-7.5	0.0	85	24.6	-24.5	-2.3	89	30.2	-30.2	-0.4
10	252	6.5	6.2	2.0	272	8.5	8.5	-0.3	287	9.0	8.6	-2.7	278	4.2	4.2	-0.6	100	7.1	-7.0	1.2	86	22.6	-22.5	-1.6	85	30.3	-30.2	-2.6
11	247	9.3	8.6	3.6	269	10.1	10.1	0.1	280	11.5	11.3	-2.0	270	4.5	4.5	0.0	97	7.0	-6.9	0.9	85	25.1	-25.0	-2.4	88	35.0	-35.0	-1.0
12	252	9.7	9.2	3.0	261	10.6	10.5	1.6	278	10.0	9.9	-1.4	248	5.7	5.3	2.1	96	6.4	-6.4	0.7	81	20.8	-20.6	-3.1	87	26.7	-26.7	-1.6
13	249	7.7	7.2	2.7	269	9.3	9.3	0.1	276	9.0	9.0	-0.9	252	4.6	4.4	1.4	96	7.1	-7.1	0.7	82	21.7	-21.5	-3.2	92	24.0	-24.0	0.8
14	235	6.8	5.6	3.9	272	9.4	9.4	-0.3	284	9.6	9.3	-2.3	278	5.3	5.3	-0.7	83	5.0	-5.0	-0.6	86	19.6	-19.6	-1.2	88	27.5	-27.5	-0.8
15	254	9.6	9.2	2.7	268	9.3	9.3	0.3	285	11.2	10.8	-2.8	276	5.7	5.7	-0.6	95	6.9	-6.9	0.6	81	22.0	-21.8	-3.3	90	27.8	-27.8	0.0
16	245	8.6	7.8	3.6	267	9.1	9.1	0.5	286	10.0	9.6	-2.7	267	5.6	5.6	0.3	115	4.3	-3.9	1.8	79	21.0	-20.6	-4.1	88	30.5	-30.5	-0.9
17	249	7.7	7.2	2.8	271	9.8	9.8	-0.1	286	10.0	9.6	-2.8	250	4.9	4.6	1.7	84	6.9	-6.9	-0.7	81	21.8	-21.5	-3.4	88	32.8	-32.8	-1.0
18	259	6.1	6.0	1.2	269	9.1	9.1	0.2	286	10.3	9.9	-2.8	278	4.9	4.9	-0.7	85	8.6	-8.6	-0.7	91	21.6	-21.6	0.5	89	30.4	-30.4	-0.5
19	249	6.8	6.4	2.4	266	9.1	9.1	0.6	287	8.7	8.3	-2.6	266	3.0	3.0	0.2	103	9.7	-9.4	2.2	87	22.2	-22.2	-1.0	91	29.9	-29.9	0.6
20	243	6.1	5.4	2.8	267	9.0	9.0	0.4	285	8.2	7.9	-2.1	268	2.7	2.7	0.1	92	8.6	-8.6	0.3	85	22.5	-22.4	-2.0	87	29.2	-29.2	-1.3
21	260	6.9	6.8	1.2	266	9.1	9.1	0.7	284	8.4	8.2	-2.0	262	3.7	3.7	0.5	92	6.3	-6.3	0.2	77	25.7	-25.1	-5.7	90	26.2	-26.2	0.2
22	232	6.2	4.9	3.8	269	9.6	9.6	0.2	280	8.7	8.6	-1.5	258	3.4	3.3	0.7	94	9.5	-9.5	0.6	82	23.2	-22.9	-3.4	85	28.4	-28.3	-2.3
23	246	6.4	5.8	2.6	262	8.5	8.4	1.2	275	8.3	8.3	-0.7	269	5.0	5.0	0.1	84	9.1	-9.1	-0.9	82	24.5	-24.3	-3.4	88	29.6	-29.6	-0.9
24	237	9.0	7.5	4.9	265	8.9	8.9	0.8	280	8.8	8.7	-1.5	258	5.6	5.5	1.2	97	8.2	-8.1	1.0	87	23.9	-23.9	-1.4	89	29.8	-29.8	-0.3
25	252	8.5	8.1	2.6	269	8.8	8.8	0.2	278	9.0	8.9	-1.2	272	4.6	4.6	-0.2	99	6.7	-6.6	1.0	81	20.9	-20.7	-3.1	88	28.9	-28.9	-1.1
26	251	8.3	7.9	2.7	269	9.8	9.8	0.1	282	10.3	10.1	-2.2	275	6.1	6.1	-0.5	105	6.4	-6.2	1.7	81	23.1	-22.8	-3.5	90	29.2	-29.2	-0.1
27	250	8.9	8.4	3.0	274	9.0	9.0	-0.7	277	9.8	9.7	-1.2	281	4.7	4.6	-0.9	98	8.4	-8.3	1.2	82	24.2	-24.0	-3.3	86	26.1	-26.1	-1.6
28	257	11.2	10.9	2.5	272	10.1	10.1	-0.3	282	9.8	9.6	-2.1	270	5.8	5.8	0.0	103	7.1	-6.9	1.6	82	25.1	-24.9	-3.4	90	27.4	-27.4	0.0
29	262	9.7	9.6	1.3	268	9.2	9.2	0.4	280	8.9	8.8	-1.5	275	4.4	4.4	-0.4	97	8.7	-8.6	1.1	88	23.2	-23.2	-0.9	89	31.3	-31.3	-0.5
30	248	8.4	7.8	3.1	269	9.3	9.3	0.1	284	8.6	8.3	-2.1	262	4.1	4.1	0.6	95	8.6	-8.6	0.8	81	23.4	-23.1	-3.8	86	28.5	-28.4	-2.1
31	248	7.4	6.8	2.8	268	9.4	9.4	0.4	283	9.2	9.0	-2.0	270	5.0	5.0	0.0	102	6.4	-6.3	1.3	79	22.1	-21.7	-4.4	90	31.0	-31.0	-0.2

Daily Normals of Upper Air Winds (1971-2000)

188

KARAIKAL

AUGUST

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	249	6.7	6.3	2.4	267	8.9	8.9	0.5	281	10.2	10.0	-2.0	271	5.0	5.0	-0.1	91	5.9	-5.9	0.1	81	24.5	-24.2	-3.8	88	32.4	-32.4	-1.2			
2	257	8.1	7.9	1.8	271	8.9	8.9	-0.2	282	9.2	9.0	-1.9	243	4.0	3.6	1.8	96	9.6	-9.5	1.0	84	23.9	-23.7	-2.7	84	29.0	-28.8	-3.0			
3	252	6.6	6.3	2.0	271	8.3	8.3	-0.1	278	7.7	7.6	-1.1	246	2.4	2.2	1.0	102	8.0	-7.8	1.7	83	25.5	-25.3	-3.3	85	31.5	-31.4	-2.6			
4	227	5.2	3.8	3.5	265	7.4	7.4	0.7	282	7.2	7.0	-1.5	280	2.9	2.9	-0.5	94	9.1	-9.1	0.7	84	25.3	-25.2	-2.5	88	24.6	-24.6	-0.7			
5	221	5.0	3.3	3.8	267	6.7	6.7	0.3	283	7.4	7.2	-1.6	257	2.8	2.7	0.6	88	8.1	-8.1	-0.3	84	27.5	-27.3	-3.0	86	28.5	-28.4	-1.8			
6	220	6.1	3.9	4.7	262	7.6	7.5	1.0	272	7.5	7.5	-0.2	271	4.1	4.1	-0.1	92	7.2	-7.2	0.2	84	22.6	-22.5	-2.2	89	29.8	-29.8	-0.4			
7	234	6.9	5.6	4.1	268	9.8	9.8	0.3	275	10.1	10.1	-0.9	262	6.1	6.0	0.8	100	6.8	-6.7	1.2	81	25.5	-25.2	-4.0	94	25.2	-25.1	1.8			
8	230	6.2	4.7	4.0	262	10.4	10.3	1.4	282	11.3	11.1	-2.3	278	6.2	6.1	-0.9	94	6.4	-6.4	0.5	83	22.4	-22.2	-2.6	89	27.0	-27.0	-0.5			
9	246	7.2	6.6	2.9	271	10.1	10.1	-0.2	282	9.5	9.3	-2.0	268	6.0	6.0	0.2	95	6.5	-6.5	0.6	85	24.5	-24.4	-2.0	88	28.3	-28.3	-1.1			
10	243	7.2	6.4	3.2	266	9.8	9.8	0.6	282	9.8	9.6	-2.0	263	4.7	4.7	0.6	99	8.7	-8.6	1.4	81	21.9	-21.6	-3.4	90	26.0	-26.0	0.2			
11	241	7.6	6.6	3.7	266	10.2	10.2	0.7	286	9.1	8.8	-2.5	271	4.2	4.2	-0.1	92	6.4	-6.4	0.2	85	23.3	-23.2	-2.1	89	24.2	-24.2	-0.5			
12	240	5.8	5.0	2.9	274	9.3	9.3	-0.7	282	9.7	9.5	-2.0	265	4.9	4.9	0.4	91	7.4	-7.4	0.1	83	24.3	-24.1	-3.0	88	29.5	-29.5	-1.0			
13	238	4.6	3.9	2.4	272	8.6	8.6	-0.3	281	10.1	9.9	-1.9	287	4.8	4.6	-1.4	95	8.4	-8.4	0.8	83	24.2	-24.0	-2.9	93	27.6	-27.6	1.3			
14	246	6.0	5.5	2.5	263	9.2	9.1	1.1	291	9.7	9.1	-3.5	288	3.2	3.0	-1.0	98	9.6	-9.5	1.4	82	22.2	-22.0	-2.9	87	29.6	-29.5	-1.8			
15	255	6.1	5.9	1.6	266	9.3	9.3	0.6	285	9.9	9.6	-2.6	249	2.6	2.4	0.9	88	9.7	-9.7	-0.3	84	24.8	-24.7	-2.4	86	25.2	-25.1	-1.6			
16	231	5.1	4.0	3.2	266	9.3	9.3	0.7	280	7.6	7.5	-1.3	270	2.8	2.8	0.0	98	7.6	-7.5	1.1	87	24.7	-24.7	-1.5	87	30.5	-30.4	-1.8			
17	229	6.0	4.5	3.9	267	9.1	9.1	0.5	273	8.4	8.4	-0.5	278	4.2	4.2	-0.6	96	7.2	-7.2	0.7	86	22.6	-22.6	-1.5	93	28.2	-28.2	1.3			
18	238	6.2	5.3	3.3	264	8.3	8.3	0.9	277	9.0	8.9	-1.1	265	4.4	4.4	0.4	98	9.1	-9.0	1.2	83	26.3	-26.1	-3.4	96	26.0	-25.9	2.7			
19	245	6.3	5.7	2.6	268	8.6	8.6	0.3	279	8.2	8.1	-1.3	265	3.5	3.5	0.3	97	8.4	-8.3	1.0	86	24.0	-23.9	-1.6	86	28.1	-28.0	-1.8			
20	244	7.9	7.1	3.4	272	9.6	9.6	-0.4	285	9.1	8.8	-2.4	261	4.0	4.0	0.6	106	7.3	-7.0	2.0	90	22.6	-22.6	-0.1	90	29.2	-29.2	-0.1			
21	243	6.4	5.7	2.9	271	8.2	8.2	-0.1	291	9.3	8.7	-3.4	304	2.3	1.9	-1.3	110	6.3	-5.9	2.2	88	23.5	-23.5	-0.8	90	28.5	-28.5	-0.2			
22	249	5.3	5.0	1.9	271	8.0	8.0	-0.1	283	7.4	7.2	-1.7	259	2.1	2.1	0.4	105	7.5	-7.3	1.9	80	20.6	-20.3	-3.6	90	27.4	-27.4	-0.2			
23	238	7.2	6.1	3.8	264	8.0	8.0	0.8	276	7.4	7.4	-0.8	241	1.3	1.1	0.6	103	9.9	-9.6	2.3	90	22.9	-22.9	0.0	91	27.3	-27.3	0.3			
24	238	5.7	4.8	3.0	265	7.7	7.7	0.7	279	8.1	8.0	-1.3	240	2.8	2.4	1.4	103	10.6	-10.3	2.4	87	23.6	-23.6	-1.3	85	25.2	-25.1	-2.1			
25	249	6.3	5.9	2.3	273	7.8	7.8	-0.4	276	7.4	7.4	-0.8	281	3.2	3.1	-0.6	94	9.5	-9.5	0.7	87	23.8	-23.8	-1.2	93	31.1	-31.1	1.7			
26	245	7.6	6.9	3.2	272	7.6	7.6	-0.2	280	9.0	8.9	-1.6	287	3.8	3.6	-1.1	96	6.6	-6.6	0.7	81	24.8	-24.5	-3.8	93	24.8	-24.8	1.4			
27	253	7.5	7.2	2.2	269	8.3	8.3	0.2	286	8.4	8.1	-2.3	267	5.4	5.4	0.3	108	9.3	-8.8	2.9	87	22.4	-22.4	-1.3	94	21.6	-21.6	1.4			
28	244	8.2	7.4	3.6	273	9.3	9.3	-0.5	288	8.6	8.2	-2.6	271	4.0	4.0	-0.1	119	8.3	-7.3	4.0	82	23.0	-22.8	-3.1	92	22.4	-22.4	0.7			
29	238	7.5	6.3	4.0	264	8.2	8.2	0.8	284	9.4	9.1	-2.3	265	3.2	3.2	0.3	102	7.7	-7.5	1.6	84	20.0	-19.9	-2.2	91	25.3	-25.3	0.5			
30	233	7.1	5.7	4.3	266	7.3	7.3	0.5	278	7.0	6.9	-1.0	280	2.3	2.3	-0.4	88	5.4	-5.4	-0.2	89	21.7	-21.7	-0.2	87	22.9	-22.9	-1.1			
31	229	7.2	5.5	4.7	267	6.0	6.0	0.3	276	6.7	6.7	-0.7	277	2.4	2.4	-0.3	84	9.1	-9.1	-0.9	90	23.6	-23.6	-0.1	91	25.1	-25.1	0.4			

Daily Normals of Upper Air Winds (1971-2000)

KARAIKAL

SEPTEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	243	7.0	6.2	3.2	271	5.6	5.6	-0.1	275	6.5	6.5	-0.6	249	0.9	0.8	0.3	101	11.7	-11.5	2.2	89	25.3	-25.3	-0.4	90	24.9	-24.9	-0.2
2	229	5.7	4.3	3.7	268	5.7	5.7	0.2	267	6.4	6.4	0.3	204	1.7	0.7	1.6	106	10.8	-10.4	2.9	87	23.4	-23.4	-1.4	92	27.5	-27.5	1.2
3	231	5.5	4.3	3.5	263	6.0	6.0	0.7	277	6.3	6.2	-0.8	252	1.3	1.2	0.4	101	9.3	-9.1	1.7	91	23.0	-23.0	0.5	86	22.8	-22.7	-1.6
4	233	5.3	4.2	3.2	267	5.5	5.5	0.3	280	5.5	5.4	-1.0	270	2.5	2.5	0.0	93	8.1	-8.1	0.4	84	23.1	-23.0	-2.4	83	24.3	-24.1	-2.9
5	226	5.7	4.1	4.0	266	6.9	6.9	0.5	273	5.1	5.1	-0.3	258	1.9	1.9	0.4	102	7.9	-7.7	1.6	90	22.0	-22.0	0.1	91	21.5	-21.5	0.3
6	238	5.4	4.6	2.9	277	6.2	6.1	-0.8	278	6.2	6.1	-0.9	279	1.9	1.9	-0.3	101	7.5	-7.4	1.4	83	21.6	-21.5	-2.5	93	22.6	-22.6	1.0
7	235	5.7	4.7	3.3	272	7.0	7.0	-0.2	281	6.5	6.4	-1.2	294	2.2	2.0	-0.9	97	6.2	-6.1	0.8	83	20.8	-20.7	-2.4	88	23.1	-23.1	-0.7
8	249	4.8	4.5	1.7	274	6.2	6.2	-0.4	279	6.2	6.1	-1.0	305	1.2	1.0	-0.7	102	8.3	-8.1	1.7	89	22.2	-22.2	-0.4	98	22.0	-21.8	3.1
9	216	3.6	2.1	2.9	280	4.8	4.7	-0.8	290	5.8	5.4	-2.0	281	1.6	1.6	-0.3	99	7.9	-7.8	1.3	88	22.3	-22.3	-0.9	94	20.1	-20.1	1.3
10	218	3.9	2.4	3.1	279	5.0	4.9	-0.8	284	5.0	4.9	-1.2	270	1.1	1.1	0.0	105	6.7	-6.5	1.8	85	19.2	-19.1	-1.7	91	21.5	-21.5	0.5
11	228	4.5	3.3	3.0	269	5.0	5.0	0.1	284	4.4	4.3	-1.1	270	0.8	0.8	0.0	102	6.8	-6.7	1.4	88	18.2	-18.2	-0.5	93	19.2	-19.2	0.9
12	221	4.5	3.0	3.4	268	4.7	4.7	0.2	274	4.0	4.0	-0.3	252	0.9	0.9	0.3	100	5.3	-5.2	0.9	89	16.6	-16.6	-0.4	91	21.0	-21.0	0.4
13	234	4.2	3.4	2.5	284	3.2	3.1	-0.8	282	3.5	3.4	-0.7	240	0.8	0.7	0.4	107	6.6	-6.3	1.9	91	17.7	-17.7	0.2	92	19.7	-19.7	0.7
14	225	4.4	3.1	3.1	274	5.3	5.3	-0.4	277	5.1	5.1	-0.6	346	0.4	0.1	-0.4	89	6.7	-6.7	-0.1	85	18.9	-18.8	-1.5	95	16.5	-16.4	1.4
15	243	5.9	5.3	2.7	278	4.4	4.4	-0.6	293	4.4	4.1	-1.7	311	2.9	2.2	-1.9	103	6.1	-5.9	1.4	96	18.3	-18.2	1.8	92	21.1	-21.1	0.6
16	226	6.3	4.5	4.4	266	5.2	5.2	0.4	289	3.7	3.5	-1.2	82	0.7	-0.7	-0.1	86	7.6	-7.6	-0.5	94	16.5	-16.5	1.1	88	22.1	-22.1	-0.6
17	243	6.1	5.4	2.8	273	4.4	4.4	-0.2	285	4.7	4.5	-1.2	81	0.6	-0.6	-0.1	100	7.8	-7.7	1.3	96	15.7	-15.6	1.7	92	21.3	-21.3	0.6
18	253	5.1	4.9	1.5	274	5.6	5.6	-0.4	285	5.0	4.8	-1.3	54	0.9	-0.7	-0.5	96	6.0	-6.0	0.6	88	16.6	-16.6	-0.6	92	19.3	-19.3	0.7
19	243	4.0	3.6	1.8	271	5.2	5.2	-0.1	289	3.7	3.5	-1.2	301	1.2	1.0	-0.6	103	6.4	-6.2	1.4	93	16.8	-16.8	1.0	92	19.2	-19.2	0.7
20	224	2.9	2.0	2.1	277	6.4	6.3	-0.8	300	4.8	4.1	-2.4	285	1.6	1.5	-0.4	97	3.4	-3.4	0.4	89	15.9	-15.9	-0.4	91	17.6	-17.6	0.3
21	247	3.6	3.3	1.4	280	5.7	5.6	-1.0	299	4.3	3.8	-2.1	309	1.9	1.5	-1.2	94	4.6	-4.6	0.3	88	13.0	-13.0	-0.5	93	18.2	-18.2	0.8
22	243	3.6	3.2	1.6	282	5.5	5.4	-1.1	297	4.6	4.1	-2.1	234	1.4	1.1	0.8	105	6.2	-6.0	1.6	94	15.3	-15.3	1.1	91	24.0	-24.0	0.5
23	219	4.3	2.7	3.3	267	3.7	3.7	0.2	275	3.5	3.5	-0.3	240	0.8	0.7	0.4	109	6.9	-6.5	2.3	93	16.5	-16.5	0.8	95	22.0	-21.9	2.1
24	251	2.8	2.6	0.9	277	4.0	4.0	-0.5	284	2.5	2.4	-0.6	171	1.8	-0.3	1.8	109	10.2	-9.6	3.3	86	17.6	-17.6	-1.3	91	18.6	-18.6	0.4
25	232	2.4	1.9	1.5	268	3.8	3.8	0.1	262	2.9	2.9	0.4	101	0.5	-0.5	0.1	98	6.9	-6.8	1.0	98	15.9	-15.8	2.1	91	19.2	-19.2	0.2
26	234	2.9	2.3	1.7	273	5.4	5.4	-0.3	253	3.1	3.0	0.9	159	0.9	-0.3	0.8	103	6.4	-6.2	1.4	86	15.5	-15.5	-1.1	95	19.2	-19.1	1.8
27	205	2.3	1.0	2.1	275	5.0	5.0	-0.4	276	3.6	3.6	-0.4	304	0.4	0.3	-0.2	102	7.7	-7.5	1.6	94	18.5	-18.5	1.3	87	16.9	-16.9	-1.0
28	232	2.4	1.9	1.5	277	4.7	4.7	-0.6	283	4.4	4.3	-1.0	270	0.3	0.3	0.0	104	7.4	-7.2	1.8	87	16.8	-16.8	-0.9	87	16.0	-16.0	-0.7
29	232	2.3	1.8	1.4	291	4.0	3.7	-1.4	290	3.0	2.8	-1.0	336	1.2	0.5	-1.1	87	6.2	-6.2	-0.3	88	15.7	-15.7	-0.5	93	15.0	-15.0	0.9
30	217	3.4	2.0	2.7	283	3.1	3.0	-0.7	290	3.0	2.8	-1.0	323	1.5	0.9	-1.2	98	6.5	-6.4	0.9	90	15.8	-15.8	0.1	91	15.4	-15.4	0.3

Daily Normals of Upper Air Winds (1971-2000)

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KARAIKAL

OCTOBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	232	2.3	1.8	1.4	278	4.2	4.2	-0.6	277	3.3	3.3	-0.4	287	3.0	2.9	-0.9	94	5.1	-5.1	0.4	95	15.1	-15.0	1.4	99	12.7	-12.6	1.9			
2	238	2.6	2.2	1.4	273	4.2	4.2	-0.2	289	4.0	3.8	-1.3	300	1.4	1.2	-0.7	107	5.1	-4.9	1.5	94	17.0	-17.0	1.1	99	15.2	-15.0	2.5			
3	238	3.8	3.2	2.0	277	4.2	4.2	-0.5	297	4.4	3.9	-2.0	267	2.1	2.1	0.1	110	5.9	-5.5	2.0	93	15.5	-15.5	0.8	84	15.2	-15.1	-1.7			
4	277	3.9	3.9	-0.5	281	4.9	4.8	-0.9	302	5.5	4.7	-2.9	264	1.8	1.8	0.2	104	4.6	-4.5	1.1	89	13.7	-13.7	-0.2	93	12.5	-12.5	0.7			
5	288	1.3	1.2	-0.4	286	4.1	3.9	-1.1	298	4.2	3.7	-2.0	283	1.3	1.3	-0.3	101	6.7	-6.6	1.3	97	15.1	-15.0	1.8	88	12.7	-12.7	-0.4			
6	315	1.7	1.2	-1.2	300	3.6	3.1	-1.8	308	2.9	2.3	-1.8	308	1.1	0.9	-0.7	102	6.6	-6.5	1.4	95	13.7	-13.6	1.3	88	14.1	-14.1	-0.4			
7	339	1.4	0.5	-1.3	316	2.8	1.9	-2.0	306	2.6	2.1	-1.5	344	0.7	0.2	-0.7	104	7.5	-7.3	1.8	94	14.2	-14.2	0.9	91	13.0	-13.0	0.2			
8	254	1.8	1.7	0.5	297	2.5	2.2	-1.1	306	2.2	1.8	-1.3	98	0.7	-0.7	0.1	91	6.1	-6.1	0.1	92	13.1	-13.1	0.4	91	15.1	-15.1	0.3			
9	235	2.4	2.0	1.4	282	2.4	2.3	-0.5	303	2.4	2.0	-1.3	159	1.4	-0.5	1.3	122	5.1	-4.3	2.7	90	11.0	-11.0	0.0	90	11.3	-11.3	0.0			
10	212	2.6	1.4	2.2	308	1.8	1.4	-1.1	300	1.6	1.4	-0.8	98	1.4	-1.4	0.2	97	5.4	-5.4	0.7	93	11.1	-11.1	0.5	88	9.9	-9.9	-0.4			
11	209	3.1	1.5	2.7	310	2.5	1.9	-1.6	326	1.1	0.6	-0.9	90	2.0	-2.0	0.0	95	5.7	-5.7	0.5	85	8.7	-8.7	-0.8	98	9.2	-9.1	1.2			
12	249	0.9	0.8	0.3	332	2.1	1.0	-1.9	324	2.2	1.3	-1.8	69	3.3	-3.1	-1.2	108	4.7	-4.5	1.5	100	10.3	-10.1	1.8	94	11.8	-11.8	0.9			
13	274	2.6	2.6	-0.2	333	2.5	1.1	-2.2	339	2.8	1.0	-2.6	47	2.1	-1.5	-1.4	93	5.3	-5.3	0.3	99	10.5	-10.4	1.6	94	11.8	-11.8	0.8			
14	312	1.5	1.1	-1.0	346	3.7	0.9	-3.6	343	3.0	0.9	-2.9	343	1.4	0.4	-1.3	109	3.6	-3.4	1.2	102	12.3	-12.0	2.6	94	10.9	-10.9	0.8			
15	287	2.8	2.7	-0.8	328	3.6	1.9	-3.1	334	3.4	1.5	-3.1	27	1.3	-0.6	-1.2	108	6.3	-6.0	2.0	96	12.4	-12.3	1.3	94	11.6	-11.6	0.9			
16	333	2.2	1.0	-2.0	345	4.3	1.1	-4.2	338	2.7	1.0	-2.5	58	1.5	-1.3	-0.8	109	4.2	-4.0	1.4	105	11.7	-11.3	3.0	94	13.3	-13.3	0.9			
17	338	1.6	0.6	-1.5	353	3.5	0.4	-3.5	344	2.6	0.7	-2.5	84	0.9	-0.9	-0.1	107	4.4	-4.2	1.3	94	8.1	-8.1	0.5	92	10.6	-10.6	0.3			
18	240	2.2	1.9	1.1	339	2.2	0.8	-2.1	316	2.8	1.9	-2.0	158	1.1	-0.4	1.0	118	5.4	-4.8	2.5	99	10.5	-10.4	1.7	85	13.1	-13.0	-1.2			
19	90	0.1	-0.1	0.0	9	2.0	-0.3	-2.0	345	2.7	0.7	-2.6	121	2.3	-2.0	1.2	113	5.6	-5.1	2.2	105	9.7	-9.4	2.5	97	14.0	-13.9	1.7			
20	360	0.4	0.0	-0.4	36	2.9	-1.7	-2.3	34	1.4	-0.8	-1.2	115	2.3	-2.1	1.0	93	4.5	-4.5	0.2	111	7.7	-7.2	2.7	98	11.9	-11.8	1.7			
21	110	1.2	-1.1	0.4	30	4.0	-2.0	-3.5	17	1.4	-0.4	-1.3	92	2.6	-2.6	0.1	105	4.9	-4.7	1.3	104	7.8	-7.6	1.9	96	10.6	-10.5	1.1			
22	326	0.4	0.2	-0.3	26	3.0	-1.3	-2.7	27	1.6	-0.7	-1.4	102	3.0	-2.9	0.6	94	4.3	-4.3	0.3	104	9.2	-8.9	2.3	100	10.1	-9.9	1.8			
23	47	2.3	-1.7	-1.6	30	3.9	-2.0	-3.4	42	2.8	-1.9	-2.1	115	2.1	-1.9	0.9	112	3.5	-3.2	1.3	105	9.2	-8.9	2.4	88	12.6	-12.6	-0.4			
24	56	2.3	-1.9	-1.3	46	4.0	-2.9	-2.8	56	3.6	-3.0	-2.0	81	3.9	-3.9	-0.6	99	4.4	-4.3	0.7	110	9.0	-8.4	3.1	96	10.3	-10.3	1.0			
25	36	4.3	-2.5	-3.5	43	4.4	-3.0	-3.2	49	2.8	-2.1	-1.8	92	3.7	-3.7	0.1	102	4.4	-4.3	0.9	112	7.4	-6.9	2.8	114	9.7	-8.8	4.0			
26	36	2.6	-1.5	-2.1	26	4.3	-1.9	-3.9	27	3.1	-1.4	-2.8	70	2.9	-2.7	-1.0	108	4.1	-3.9	1.3	108	7.7	-7.3	2.4	92	9.7	-9.7	0.3			
27	12	3.5	-0.7	-3.4	22	4.2	-1.6	-3.9	53	3.5	-2.8	-2.1	93	2.2	-2.2	0.1	100	5.0	-4.9	0.9	95	6.5	-6.5	0.6	101	7.6	-7.5	1.4			
28	38	2.8	-1.7	-2.2	30	3.9	-2.0	-3.4	35	1.9	-1.1	-1.6	123	2.0	-1.7	1.1	118	4.7	-4.1	2.2	110	7.3	-6.9	2.5	94	9.0	-9.0	0.6			
29	29	3.5	-1.7	-3.1	27	3.9	-1.8	-3.5	13	1.8	-0.4	-1.8	75	1.1	-1.1	-0.3	114	4.5	-4.1	1.8	119	8.2	-7.2	4.0	105	7.9	-7.6	2.0			
30	3	4.3	-0.2	-4.3	17	5.0	-1.5	-4.8	3	1.7	-0.1	-1.7	135	1.7	-1.2	1.2	102	5.0	-4.9	1.0	106	8.9	-8.5	2.5	113	8.9	-8.2	3.4			
31	30	1.6	-0.8	-1.4	14	3.4	-0.8	-3.3	12	1.4	-0.3	-1.4	82	1.4	-1.4	-0.2	110	4.4	-4.1	1.5	109	10.2	-9.6	3.3	90	8.7	-8.7	0.0			

Daily Normals of Upper Air Winds (1971-2000)

KARAIKAL

NOVEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	39	1.9	-1.2	-1.5	14	4.1	-1.0	-4.0	357	2.0	0.1	-2.0	56	1.8	-1.5	-1.0	123	4.8	-4.0	2.6	107	7.4	-7.1	2.2	101	6.1	-6.0	1.2
2	11	1.6	-0.3	-1.6	17	2.4	-0.7	-2.3	27	0.9	-0.4	-0.8	94	1.5	-1.5	0.1	119	5.0	-4.4	2.4	111	7.3	-6.8	2.6	96	8.8	-8.8	0.9
3	25	8.1	-3.4	-7.3	22	4.8	-1.8	-4.5	45	1.1	-0.8	-0.8	120	2.4	-2.1	1.2	136	6.1	-4.2	4.4	114	11.4	-10.4	4.7	111	10.9	-10.2	3.9
4	22	5.5	-2.1	-5.1	31	3.7	-1.9	-3.2	29	1.8	-0.9	-1.6	85	2.1	-2.1	-0.2	135	4.9	-3.5	3.5	137	8.3	-5.6	6.1	107	8.3	-7.9	2.4
5	47	7.1	-5.2	-4.9	39	4.4	-2.8	-3.4	46	3.0	-2.2	-2.1	101	2.1	-2.1	0.4	116	4.1	-3.7	1.8	112	7.1	-6.6	2.6	109	8.1	-7.7	2.6
6	34	5.9	-3.3	-4.9	33	4.6	-2.5	-3.9	62	3.0	-2.6	-1.4	113	2.5	-2.3	1.0	123	5.0	-4.2	2.7	125	7.8	-6.4	4.4	100	9.5	-9.3	1.7
7	44	4.9	-3.4	-3.5	42	3.6	-2.4	-2.7	70	2.7	-2.5	-0.9	113	2.8	-2.6	1.1	118	4.4	-3.9	2.1	113	8.0	-7.4	3.1	108	5.9	-5.6	1.8
8	69	4.9	-4.6	-1.8	46	4.3	-3.1	-3.0	84	0.9	-0.9	-0.1	121	3.1	-2.7	1.6	101	4.8	-4.7	0.9	112	8.4	-7.8	3.1	104	6.3	-6.1	1.5
9	67	4.9	-4.5	-1.9	60	3.6	-3.1	-1.8	73	2.1	-2.0	-0.6	90	3.7	-3.7	0.0	116	4.1	-3.7	1.8	110	8.2	-7.7	2.8	98	7.1	-7.0	1.0
10	69	4.7	-4.4	-1.7	47	4.7	-3.4	-3.2	63	2.7	-2.4	-1.2	82	3.0	-3.0	-0.4	108	4.4	-4.2	1.4	121	10.2	-8.8	5.2	99	6.9	-6.8	1.1
11	54	6.8	-5.5	-4.0	35	4.5	-2.6	-3.7	46	4.7	-3.4	-3.3	72	3.5	-3.3	-1.1	97	6.1	-6.1	0.7	121	11.7	-10.0	6.0	89	7.2	-7.2	-0.1
12	42	7.3	-4.9	-5.4	37	4.5	-2.7	-3.6	40	3.4	-2.2	-2.6	67	3.0	-2.8	-1.2	115	4.7	-4.2	2.0	129	8.0	-6.2	5.0	117	6.4	-5.7	2.9
13	42	8.3	-5.5	-6.2	33	5.9	-3.2	-5.0	33	3.7	-2.0	-3.1	59	2.7	-2.3	-1.4	124	6.0	-5.0	3.4	117	9.6	-8.6	4.3	101	5.7	-5.6	1.1
14	55	5.4	-4.4	-3.1	31	4.7	-2.4	-4.0	18	1.3	-0.4	-1.2	82	2.7	-2.7	-0.4	110	5.0	-4.7	1.7	114	9.0	-8.2	3.7	98	8.4	-8.3	1.1
15	42	4.5	-3.0	-3.3	39	3.6	-2.3	-2.8	30	0.8	-0.4	-0.7	122	2.8	-2.4	1.5	121	5.6	-4.8	2.9	117	9.1	-8.1	4.2	95	8.6	-8.6	0.7
16	57	3.5	-2.9	-1.9	41	3.3	-2.2	-2.5	120	0.8	-0.7	0.4	99	1.3	-1.3	0.2	109	5.3	-5.0	1.7	122	8.5	-7.2	4.5	112	5.3	-4.9	2.0
17	59	4.2	-3.6	-2.2	41	4.3	-2.8	-3.2	84	1.9	-1.9	-0.2	99	2.5	-2.5	0.4	118	4.3	-3.8	2.0	126	9.5	-7.7	5.5	102	5.8	-5.7	1.2
18	46	4.0	-2.9	-2.8	49	4.5	-3.4	-3.0	57	2.7	-2.3	-1.5	86	3.2	-3.2	-0.2	119	5.1	-4.5	2.5	141	7.6	-4.8	5.9	93	5.1	-5.1	0.3
19	37	4.0	-2.4	-3.2	36	5.1	-3.0	-4.1	50	1.6	-1.2	-1.0	82	2.2	-2.2	-0.3	152	3.6	-1.7	3.2	148	9.2	-4.9	7.8	112	6.5	-6.0	2.4
20	56	5.4	-4.5	-3.0	37	5.5	-3.3	-4.4	22	2.2	-0.8	-2.0	67	3.8	-3.5	-1.5	155	3.5	-1.5	3.2	148	12.0	-6.4	10.2	118	5.0	-4.4	2.3
21	54	5.2	-4.2	-3.1	39	5.8	-3.7	-4.5	57	3.0	-2.5	-1.6	92	3.6	-3.6	0.1	175	3.2	-0.3	3.2	149	9.9	-5.1	8.5	97	6.3	-6.2	0.8
22	53	6.4	-5.1	-3.9	43	5.7	-3.9	-4.2	53	2.6	-2.1	-1.6	96	3.8	-3.8	0.4	187	3.4	0.4	3.4	156	6.9	-2.8	6.3	113	4.1	-3.8	1.6
23	58	7.4	-6.3	-3.9	44	6.0	-4.2	-4.3	58	4.5	-3.8	-2.4	54	3.9	-3.2	-2.3	108	1.9	-1.8	0.6	153	6.5	-2.9	5.8	106	5.0	-4.8	1.4
24	38	8.8	-5.4	-7.0	30	7.5	-3.8	-6.5	41	2.9	-1.9	-2.2	76	4.0	-3.9	-1.0	135	2.4	-1.7	1.7	183	5.5	0.3	5.5	114	6.6	-6.0	2.7
25	38	7.1	-4.4	-5.6	40	5.1	-3.3	-3.9	46	4.0	-2.9	-2.8	75	3.8	-3.7	-1.0	141	2.1	-1.3	1.6	148	6.1	-3.2	5.2	100	4.1	-4.0	0.7
26	26	8.1	-3.6	-7.3	38	6.6	-4.0	-5.2	52	3.4	-2.7	-2.1	75	4.9	-4.7	-1.3	121	3.3	-2.8	1.7	143	5.9	-3.6	4.7	112	4.8	-4.5	1.8
27	31	8.2	-4.2	-7.0	40	7.8	-5.0	-6.0	55	4.4	-3.6	-2.5	74	6.6	-6.3	-1.8	139	3.5	-2.3	2.6	149	6.1	-3.1	5.2	107	6.2	-5.9	1.8
28	23	7.6	-2.9	-7.0	42	7.8	-5.2	-5.8	52	4.6	-3.6	-2.8	69	6.6	-6.2	-2.4	99	3.6	-3.6	0.6	148	6.8	-3.6	5.8	82	2.9	-2.9	-0.4
29	30	8.9	-4.4	-7.7	45	7.6	-5.4	-5.4	62	4.0	-3.5	-1.9	79	4.7	-4.6	-0.9	163	2.7	-0.8	2.6	179	9.4	-0.2	9.4	125	5.4	-4.4	3.1
30	40	6.7	-4.3	-5.2	49	6.9	-5.2	-4.5	68	5.4	-5.0	-2.0	79	5.8	-5.7	-1.1	127	3.4	-2.7	2.0	156	7.8	-3.2	7.1	103	7.3	-7.1	1.6

Daily Normals of Upper Air Winds (1971-2000)

192

KARAIKAL

DECEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	31	7.8	-4.0	-6.7	46	7.4	-5.3	-5.1	73	4.7	-4.5	-1.4	79	5.7	-5.6	-1.1	137	3.7	-2.5	2.7	162	8.0	-2.4	7.6	111	2.2	-2.1	0.8			
2	34	8.3	-4.7	-6.9	53	6.9	-5.5	-4.2	70	4.8	-4.5	-1.6	69	7.4	-6.9	-2.6	121	3.7	-3.2	1.9	152	9.4	-4.5	8.3	145	2.9	-1.7	2.4			
3	27	7.9	-3.6	-7.0	43	7.6	-5.2	-5.5	62	6.6	-5.8	-3.1	67	7.4	-6.8	-2.9	130	4.8	-3.7	3.1	164	7.1	-2.0	6.8	110	3.8	-3.6	1.3			
4	47	3.4	-2.5	-2.3	52	6.1	-4.8	-3.8	59	4.3	-3.7	-2.2	90	5.2	-5.2	0.0	158	4.5	-1.7	4.2	177	7.0	-0.4	7.0	130	3.8	-2.9	2.4			
5	40	6.0	-3.9	-4.6	51	8.0	-6.2	-5.0	68	5.6	-5.2	-2.1	66	5.2	-4.8	-2.1	174	2.9	-0.3	2.9	177	6.3	-0.3	6.3	102	4.4	-4.3	0.9			
6	43	6.9	-4.7	-5.1	48	6.2	-4.6	-4.1	50	3.3	-2.5	-2.1	62	4.0	-3.5	-1.9	140	2.5	-1.6	1.9	155	6.4	-2.7	5.8	103	5.8	-5.7	1.3			
7	35	8.9	-5.1	-7.3	38	6.6	-4.1	-5.2	58	4.5	-3.8	-2.4	55	2.8	-2.3	-1.6	183	2.2	0.1	2.2	161	9.0	-3.0	8.5	120	5.6	-4.9	2.8			
8	23	7.0	-2.7	-6.5	34	5.2	-2.9	-4.3	62	3.0	-2.6	-1.4	56	3.0	-2.5	-1.7	199	3.4	1.1	3.2	170	10.5	-1.8	10.3	92	3.7	-3.7	0.1			
9	33	7.5	-4.1	-6.3	41	5.0	-3.3	-3.8	63	4.0	-3.6	-1.8	92	2.9	-2.9	0.1	212	2.5	1.3	2.1	181	5.0	0.1	5.0	197	3.1	0.9	3.0			
10	50	5.9	-4.5	-3.8	50	5.4	-4.1	-3.5	68	4.3	-4.0	-1.6	81	3.2	-3.2	-0.5	193	2.6	0.6	2.5	170	7.7	-1.3	7.6	107	4.7	-4.5	1.4			
11	36	8.4	-5.0	-6.8	55	6.3	-5.2	-3.6	67	4.6	-4.2	-1.8	75	5.2	-5.0	-1.3	157	3.6	-1.4	3.3	163	6.4	-1.9	6.1	105	6.5	-6.3	1.7			
12	45	8.8	-6.2	-6.2	58	7.6	-6.5	-4.0	88	5.0	-5.0	-0.2	94	4.5	-4.5	0.3	215	4.7	2.7	3.8	184	8.9	0.7	8.9	161	3.1	-1.0	2.9			
13	50	7.8	-6.0	-5.0	56	6.1	-5.1	-3.4	70	4.0	-3.8	-1.4	81	3.7	-3.7	-0.6	233	2.1	1.7	1.3	204	5.9	2.4	5.4	111	3.1	-2.9	1.1			
14	42	8.1	-5.4	-6.0	46	6.5	-4.7	-4.5	67	4.4	-4.1	-1.7	71	3.9	-3.7	-1.3	228	2.5	1.9	1.7	215	8.0	4.6	6.5	188	0.7	0.1	0.7			
15	35	10.5	-6.0	-8.6	50	10.2	-7.8	-6.6	60	4.2	-3.6	-2.1	72	3.6	-3.4	-1.1	249	3.4	3.2	1.2	235	5.2	4.3	3.0	18	0.3	-0.1	-0.3			
16	43	8.4	-5.7	-6.2	52	6.7	-5.3	-4.1	77	3.7	-3.6	-0.8	68	3.7	-3.4	-1.4	218	3.4	2.1	2.7	209	6.0	2.9	5.3	184	1.3	0.1	1.3			
17	34	9.9	-5.6	-8.2	51	7.9	-6.1	-5.0	77	5.4	-5.3	-1.2	74	3.7	-3.6	-1.0	203	2.5	1.0	2.3	189	8.5	1.4	8.4	105	2.8	-2.7	0.7			
18	37	8.9	-5.4	-7.1	53	6.4	-5.1	-3.9	62	3.6	-3.2	-1.7	82	3.7	-3.7	-0.5	194	2.9	0.7	2.8	196	9.1	2.5	8.7	145	1.6	-0.9	1.3			
19	37	8.2	-4.9	-6.6	47	7.6	-5.5	-5.2	47	4.4	-3.2	-3.0	94	3.2	-3.2	0.2	210	3.0	1.5	2.6	200	7.6	2.6	7.1	90	1.5	-1.5	0.0			
20	39	9.2	-5.8	-7.2	54	7.7	-6.2	-4.5	74	3.3	-3.2	-0.9	57	3.3	-2.8	-1.8	225	5.1	3.6	3.6	208	8.9	4.2	7.8	93	1.7	-1.7	0.1			
21	51	7.8	-6.1	-4.9	53	6.9	-5.5	-4.2	67	4.7	-4.3	-1.8	72	3.5	-3.3	-1.1	233	3.1	2.5	1.9	225	8.1	5.7	5.7	10	2.2	-0.4	-2.2			
22	46	7.9	-5.7	-5.5	58	7.3	-6.2	-3.8	70	4.4	-4.1	-1.5	71	3.9	-3.7	-1.3	218	5.7	3.5	4.5	231	7.0	5.4	4.4	182	2.4	0.1	2.4			
23	43	9.6	-6.5	-7.0	48	6.7	-5.0	-4.5	73	4.8	-4.6	-1.4	80	3.9	-3.8	-0.7	231	4.6	3.6	2.9	205	7.2	3.1	6.5	154	3.0	-1.3	2.7			
24	39	7.7	-4.9	-6.0	54	6.4	-5.2	-3.8	57	3.5	-2.9	-1.9	67	3.0	-2.8	-1.2	228	4.0	3.0	2.7	193	5.7	1.3	5.5	216	2.7	1.6	2.2			
25	27	8.1	-3.7	-7.2	64	6.1	-5.5	-2.7	79	3.1	-3.0	-0.6	97	2.6	-2.6	0.3	228	4.7	3.5	3.2	222	9.2	6.2	6.8	235	1.9	1.6	1.1			
26	35	8.3	-4.7	-6.8	56	6.9	-5.7	-3.9	81	3.1	-3.1	-0.5	103	0.9	-0.9	0.2	240	5.3	4.6	2.7	220	11.6	7.5	8.9	229	3.3	2.5	2.2			
27	51	9.1	-7.1	-5.7	63	6.8	-6.0	-3.1	80	4.2	-4.1	-0.7	102	2.5	-2.4	0.5	202	3.1	1.2	2.9	215	9.5	5.5	7.8	264	1.8	1.8	0.2			
28	47	8.0	-5.8	-5.5	52	5.7	-4.5	-3.5	103	2.8	-2.7	0.6	131	1.8	-1.4	1.2	224	4.0	2.8	2.9	233	10.0	8.0	6.0	116	3.0	-2.7	1.3			
29	47	8.2	-6.0	-5.6	61	5.5	-4.8	-2.7	95	3.7	-3.7	0.3	75	3.5	-3.4	-0.9	229	4.5	3.4	3.0	213	8.7	4.8	7.3	188	3.4	0.5	3.4			
30	53	7.6	-6.1	-4.6	48	5.0	-3.7	-3.3	54	2.6	-2.1	-1.5	84	3.0	-3.0	-0.3	228	2.5	1.9	1.7	221	9.1	6.0	6.8	158	0.5	-0.2	0.5			
31	44	7.7	-5.4	-5.5	50	5.4	-4.1	-3.5	84	2.9	-2.9	-0.3	99	1.2	-1.2	0.2	256	4.4	4.3	1.1	237	9.4	7.9	5.1	180	1.9	0.0	1.9			

Daily Normals of Upper Air Winds (1971-2000)

193

KOLKATA

JANUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	344	5.0	1.4	-4.8	314	6.0	4.3	-4.2	294	11.6	10.6	-4.7	272	23.0	23.0	-0.9	268	38.8	38.8	1.5	259	40.5	39.8	7.4	267	19.8	19.8	0.9			
2	339	5.0	1.8	-4.7	314	5.9	4.3	-4.1	288	11.9	11.3	-3.7	275	22.5	22.4	-2.1	265	37.9	37.8	3.3	258	41.5	40.6	8.5	269	20.8	20.8	0.5			
3	339	3.6	1.3	-3.4	318	6.4	4.3	-4.8	294	12.4	11.4	-5.0	279	22.1	21.8	-3.4	278	39.5	39.1	-5.6	264	43.0	42.7	4.7	267	26.2	26.2	1.6			
4	328	3.4	1.8	-2.9	313	5.4	3.9	-3.7	291	10.2	9.5	-3.7	277	19.0	18.8	-2.4	270	37.8	37.8	0.1	265	42.1	41.9	3.8	272	22.6	22.6	-0.9			
5	325	2.9	1.7	-2.4	315	5.8	4.1	-4.1	286	11.1	10.7	-3.1	274	19.6	19.5	-1.5	267	33.9	33.9	1.6	262	40.4	40.0	5.5	268	29.0	29.0	0.9			
6	321	3.2	2.0	-2.5	314	5.8	4.2	-4.0	292	12.4	11.5	-4.7	273	21.9	21.9	-1.1	266	35.1	35.0	2.6	259	36.9	36.3	6.8	263	21.8	21.7	2.5			
7	321	2.6	1.6	-2.0	312	4.6	3.4	-3.1	286	11.5	11.1	-3.1	275	22.6	22.5	-1.8	265	35.8	35.7	3.1	259	40.3	39.6	7.6	264	22.8	22.7	2.3			
8	303	3.0	2.5	-1.6	299	5.1	4.5	-2.5	285	11.6	11.2	-3.0	277	23.0	22.8	-2.9	268	38.2	38.2	1.5	259	41.9	41.2	7.8	258	20.1	19.7	4.2			
9	312	3.9	2.9	-2.6	304	5.3	4.4	-3.0	286	11.3	10.9	-3.1	272	20.8	20.8	-0.9	271	35.4	35.4	-0.8	257	39.8	38.7	9.2	256	24.8	24.1	6.0			
10	335	4.7	2.0	-4.3	307	6.8	5.4	-4.1	288	12.5	11.9	-3.8	270	23.5	23.5	0.1	259	36.3	35.6	6.9	252	37.5	35.8	11.3	261	20.7	20.4	3.3			
11	314	3.3	2.4	-2.3	311	5.8	4.4	-3.8	290	11.7	11.0	-3.9	273	23.4	23.4	-1.2	262	37.9	37.6	5.0	256	41.5	40.2	10.2	258	25.0	24.4	5.3			
12	306	2.9	2.3	-1.7	303	5.3	4.4	-2.9	284	12.2	11.9	-2.9	272	25.9	25.9	-0.9	262	39.3	38.9	5.5	255	47.8	46.3	12.0	273	22.9	22.9	-1.1			
13	292	2.7	2.5	-1.0	302	6.2	5.2	-3.3	282	13.2	12.9	-2.8	274	25.6	25.5	-1.8	266	39.4	39.3	2.9	256	46.6	45.2	11.5	261	23.5	23.2	3.5			
14	323	3.6	2.2	-2.9	303	6.2	5.2	-3.4	287	13.1	12.5	-3.9	275	24.8	24.7	-2.0	266	40.2	40.1	3.1	259	45.0	44.1	8.9	258	27.9	27.3	5.7			
15	236	0.7	0.6	0.4	301	5.0	4.3	-2.6	283	11.9	11.6	-2.6	275	24.9	24.8	-2.1	268	37.9	37.9	1.3	260	40.0	39.4	7.0	263	22.5	22.3	2.6			
16	299	3.3	2.9	-1.6	288	5.9	5.6	-1.8	286	15.0	14.4	-4.1	274	25.8	25.7	-1.8	272	40.4	40.4	-1.7	261	41.2	40.7	6.3	271	20.3	20.3	-0.3			
17	329	5.1	2.6	-4.4	300	6.9	6.0	-3.5	287	13.6	13.0	-4.0	276	24.9	24.7	-2.8	268	37.6	37.6	1.3	260	38.0	37.4	6.6	268	23.6	23.6	0.7			
18	331	4.5	2.2	-3.9	308	7.4	5.8	-4.6	290	12.1	11.4	-4.1	280	21.1	20.8	-3.7	272	40.2	40.2	-1.3	258	43.7	42.8	8.9	270	19.1	19.1	0.1			
19	318	4.3	2.9	-3.2	305	7.1	5.8	-4.1	287	14.1	13.5	-4.0	277	23.5	23.3	-2.9	266	36.0	35.9	2.4	256	38.2	37.1	9.0	268	24.7	24.7	1.0			
20	295	1.4	1.3	-0.6	299	5.1	4.5	-2.5	287	12.6	12.0	-3.7	275	22.4	22.3	-2.0	266	34.4	34.3	2.6	254	36.9	35.5	10.2	263	21.3	21.1	2.6			
21	317	4.0	2.7	-2.9	305	5.7	4.7	-3.3	286	12.7	12.2	-3.4	274	23.5	23.4	-1.8	260	37.3	36.7	6.4	255	43.0	41.6	11.0	251	23.8	22.6	7.6			
22	312	4.5	3.3	-3.0	303	6.0	5.0	-3.3	292	12.9	11.9	-4.9	280	24.9	24.5	-4.2	266	35.5	35.4	2.3	257	39.6	38.6	8.9	264	24.7	24.6	2.6			
23	310	3.9	3.0	-2.5	307	5.9	4.7	-3.6	293	13.1	12.1	-5.1	280	23.7	23.3	-4.2	270	32.6	32.6	-0.2	264	38.5	38.3	3.7	269	19.4	19.4	0.2			
24	313	4.5	3.3	-3.1	308	6.6	5.2	-4.0	298	15.3	13.5	-7.2	275	22.8	22.7	-2.1	261	32.1	31.7	4.8	256	35.1	34.1	8.2	258	20.0	19.6	4.0			
25	318	5.9	4.0	-4.4	307	6.5	5.2	-3.9	298	12.6	11.1	-6.0	279	20.8	20.5	-3.4	267	33.1	33.1	1.5	256	39.3	38.1	9.8	258	22.4	21.9	4.8			
26	329	5.4	2.8	-4.6	311	6.3	4.8	-4.1	292	11.6	10.8	-4.3	276	20.3	20.2	-2.0	267	32.5	32.5	1.5	258	36.7	35.8	7.9	264	21.7	21.6	2.4			
27	309	4.4	3.4	-2.8	311	5.5	4.1	-3.6	293	11.0	10.1	-4.3	274	21.8	21.7	-1.5	264	34.2	34.0	3.7	256	37.4	36.3	9.1	263	17.7	17.5	2.3			
28	329	2.9	1.5	-2.5	301	6.1	5.2	-3.1	285	11.6	11.2	-2.9	273	22.2	22.2	-1.0	262	34.2	33.9	4.7	252	39.8	37.9	12.0	261	23.0	22.7	3.7			
29	302	2.6	2.2	-1.4	297	6.0	5.4	-2.7	290	13.2	12.4	-4.4	276	24.5	24.4	-2.4	267	34.9	34.8	2.1	257	39.5	38.5	8.8	265	23.5	23.4	2.1			
30	301	2.1	1.8	-1.1	293	6.9	6.3	-2.7	288	13.1	12.4	-4.1	275	22.2	22.1	-1.9	267	38.2	38.1	2.3	260	41.7	41.1	7.0	265	23.8	23.7	2.0			
31	315	1.6	1.1	-1.1	290	5.8	5.4	-2.0	287	12.6	12.1	-3.6	273	24.5	24.5	-1.1	265	38.9	38.7	3.6	258	39.5	38.6	8.2	262	24.0	23.8	3.4			

Daily Normals of Upper Air Winds (1971-2000)

194

KOLKATA

FEBRUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	337	2.5	1.0	-2.3	287	5.7	5.4	-1.7	284	12.9	12.5	-3.2	274	25.1	25.0	-1.7	271	37.0	37.0	-0.4	259	41.8	41.0	8.1	263	20.6	20.4	2.5			
2	324	2.2	1.3	-1.8	302	5.9	5.0	-3.1	285	13.5	13.1	-3.4	276	24.4	24.3	-2.4	267	36.5	36.4	2.0	264	45.1	44.8	4.9	270	29.6	29.6	0.2			
3	301	1.2	1.0	-0.6	286	4.6	4.4	-1.3	288	12.4	11.8	-3.8	273	24.1	24.1	-1.4	265	35.8	35.6	3.3	259	41.0	40.3	7.6	261	25.3	25.0	3.9			
4	333	3.1	1.4	-2.8	291	6.1	5.7	-2.2	282	12.5	12.2	-2.6	275	24.4	24.3	-2.3	267	37.8	37.8	1.8	264	39.7	39.5	3.9	257	24.0	23.4	5.3			
5	333	2.2	1.0	-2.0	279	6.1	6.0	-0.9	281	12.4	12.2	-2.4	269	23.1	23.1	0.4	263	40.6	40.3	5.3	260	39.2	38.7	6.5	264	24.0	23.8	2.7			
6	311	2.1	1.6	-1.4	288	6.3	6.0	-2.0	286	13.2	12.7	-3.7	278	22.6	22.4	-3.3	266	39.2	39.1	2.4	260	39.2	38.6	7.0	264	22.9	22.8	2.2			
7	285	2.4	2.3	-0.6	288	5.4	5.1	-1.7	284	11.5	11.2	-2.8	276	22.4	22.3	-2.4	268	34.0	34.0	1.3	265	41.5	41.3	3.6	263	20.4	20.2	2.5			
8	295	2.1	1.9	-0.9	290	5.5	5.2	-1.9	284	13.2	12.8	-3.2	276	23.4	23.3	-2.6	268	39.2	39.2	1.7	256	40.4	39.2	9.9	259	25.0	24.5	4.9			
9	174	1.0	-0.1	1.0	287	3.9	3.7	-1.1	285	12.3	11.9	-3.2	275	22.8	22.7	-2.1	267	35.3	35.2	2.1	256	39.6	38.4	9.5	274	22.5	22.4	-1.5			
10	315	0.8	0.6	-0.6	297	4.2	3.8	-1.9	285	11.8	11.4	-3.1	277	21.2	21.0	-2.6	273	34.9	34.9	-1.6	279	40.7	40.2	-6.2	272	26.6	26.6	-0.9			
11	320	3.1	2.0	-2.4	285	5.4	5.2	-1.4	288	12.2	11.6	-3.7	277	24.1	23.9	-3.0	270	34.0	34.0	-0.1	266	38.0	37.9	2.8	274	24.6	24.5	-1.9			
12	274	2.8	2.8	-0.2	288	5.1	4.8	-1.6	293	13.4	12.4	-5.2	278	22.8	22.6	-3.2	275	35.1	35.0	-3.2	262	42.0	41.6	5.9	265	22.2	22.1	1.8			
13	290	3.2	3.0	-1.1	283	4.9	4.8	-1.1	292	13.9	12.8	-5.3	279	22.2	21.9	-3.5	272	37.3	37.3	-1.4	268	43.0	43.0	1.3	268	24.5	24.5	0.7			
14	286	4.1	3.9	-1.1	289	5.9	5.6	-1.9	290	13.1	12.3	-4.5	273	22.3	22.3	-1.3	266	36.9	36.8	2.5	265	39.3	39.2	3.1	267	22.1	22.1	1.1			
15	299	3.8	3.3	-1.8	289	4.9	4.6	-1.6	293	12.6	11.6	-4.9	267	22.8	22.8	1.1	269	37.5	37.5	0.7	263	40.9	40.6	5.3	264	21.5	21.4	2.1			
16	284	4.2	4.1	-1.0	280	5.3	5.2	-0.9	283	12.0	11.7	-2.7	274	24.2	24.2	-1.5	270	38.8	38.8	-0.2	263	38.5	38.2	4.8	263	19.2	19.0	2.4			
17	267	1.9	1.9	0.1	277	4.7	4.7	-0.6	278	11.9	11.8	-1.7	272	24.0	24.0	-0.9	262	40.2	39.8	5.7	256	42.0	40.7	10.2	256	26.9	26.1	6.4			
18	241	2.1	1.8	1.0	285	5.3	5.1	-1.4	283	11.8	11.5	-2.6	273	22.9	22.9	-1.1	267	39.7	39.6	2.3	258	38.4	37.5	8.2	263	26.1	25.9	3.2			
19	246	2.0	1.8	0.8	287	5.1	4.9	-1.5	284	13.9	13.5	-3.4	273	23.4	23.4	-1.3	262	37.1	36.7	5.1	256	39.5	38.3	9.5	261	21.7	21.4	3.3			
20	195	1.1	0.3	1.1	289	4.9	4.6	-1.6	284	12.0	11.6	-2.9	270	23.6	23.6	0.2	265	37.4	37.2	3.5	257	38.6	37.6	8.8	266	24.6	24.5	1.6			
21	278	0.7	0.7	-0.1	300	3.9	3.4	-2.0	287	12.3	11.8	-3.5	270	24.1	24.1	-0.2	264	37.2	37.0	3.9	254	40.3	38.7	11.1	261	21.4	21.2	3.2			
22	270	1.2	1.2	0.0	286	5.4	5.2	-1.5	286	12.6	12.1	-3.4	273	24.6	24.6	-1.1	263	36.7	36.4	4.7	257	42.1	41.1	9.3	268	23.9	23.9	1.0			
23	287	1.7	1.6	-0.5	294	5.5	5.0	-2.2	290	13.4	12.6	-4.7	275	22.5	22.4	-2.0	261	34.1	33.7	5.4	254	34.6	33.3	9.5	264	17.0	16.9	1.9			
24	279	0.6	0.6	-0.1	296	5.8	5.2	-2.5	294	12.9	11.8	-5.2	274	22.8	22.7	-1.7	267	32.8	32.8	1.6	262	37.9	37.5	5.3	263	24.0	23.8	3.0			
25	283	1.8	1.8	-0.4	294	6.2	5.7	-2.5	296	13.0	11.7	-5.6	279	21.9	21.7	-3.3	264	34.3	34.1	3.6	256	38.8	37.7	9.3	264	18.8	18.7	2.1			
26	257	3.1	3.0	0.7	282	5.3	5.2	-1.1	289	12.4	11.7	-4.0	278	21.6	21.4	-2.9	271	34.1	34.1	-0.6	269	34.8	34.8	0.7	271	16.6	16.6	-0.2			
27	282	2.4	2.3	-0.5	285	6.2	6.0	-1.6	288	13.6	12.9	-4.2	273	22.0	22.0	-1.1	264	32.4	32.2	3.5	261	32.1	31.7	5.3	263	19.3	19.2	2.2			
28	276	2.9	2.9	-0.3	284	5.5	5.3	-1.3	292	14.4	13.4	-5.3	279	20.9	20.6	-3.4	267	33.0	33.0	1.7	262	38.2	37.9	5.0	266	23.0	22.9	1.7			
29	301	2.7	2.3	-1.4	295	7.7	7.0	-3.3	289	16.9	16.0	-5.4	286	20.4	19.6	-5.8	271	33.1	33.1	-0.4	249	37.3	34.8	13.4	270	23.0	23.0	0.2			

Daily Normals of Upper Air Winds (1971-2000)

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KOLKATA

MARCH

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	310	3.5	2.7	-2.3	281	5.8	5.7	-1.1	287	13.5	12.9	-4.0	279	22.4	22.1	-3.6	267	33.1	33.1	1.8	261	35.9	35.4	5.7	265	23.7	23.6	1.9			
2	326	3.4	1.9	-2.8	291	5.8	5.4	-2.1	290	13.6	12.8	-4.7	277	20.3	20.1	-2.5	268	31.9	31.9	1.3	254	34.5	33.2	9.3	255	16.1	15.6	4.1			
3	298	1.7	1.5	-0.8	285	5.1	4.9	-1.3	296	12.3	11.0	-5.4	281	18.2	17.8	-3.6	267	31.9	31.9	1.4	259	33.2	32.5	6.6	264	18.6	18.5	1.9			
4	291	3.1	2.9	-1.1	286	4.4	4.2	-1.2	297	11.8	10.5	-5.3	285	18.6	18.0	-4.7	275	32.3	32.2	-2.9	263	34.3	34.0	4.3	264	19.6	19.5	2.2			
5	285	3.8	3.7	-1.0	292	5.0	4.6	-1.9	292	12.4	11.5	-4.7	278	21.7	21.5	-3.0	269	32.6	32.6	0.5	258	37.7	36.9	7.8	266	16.9	16.9	1.1			
6	310	2.3	1.8	-1.5	277	5.6	5.6	-0.7	289	12.2	11.5	-4.0	277	19.4	19.3	-2.4	268	31.3	31.3	1.3	259	34.3	33.7	6.6	266	24.4	24.3	1.8			
7	282	2.5	2.4	-0.5	282	4.4	4.3	-0.9	291	12.2	11.4	-4.4	281	18.3	18.0	-3.4	267	32.9	32.9	1.5	265	34.6	34.5	3.1	265	17.8	17.7	1.6			
8	293	4.8	4.4	-1.9	285	5.5	5.3	-1.4	290	12.3	11.6	-4.2	281	19.0	18.6	-3.7	273	32.0	31.9	-1.9	268	34.3	34.3	1.0	270	19.8	19.8	0.1			
9	304	2.9	2.4	-1.6	284	5.3	5.1	-1.3	286	11.5	11.1	-3.1	280	19.3	19.0	-3.2	264	35.0	34.8	3.6	260	38.7	38.1	6.8	266	17.9	17.9	1.1			
10	273	1.7	1.7	-0.1	283	4.3	4.2	-1.0	295	11.7	10.6	-5.0	281	17.8	17.5	-3.5	265	31.3	31.2	2.5	257	39.5	38.4	9.1	262	21.8	21.6	2.9			
11	264	3.0	3.0	0.3	283	4.9	4.8	-1.1	292	10.1	9.4	-3.8	270	19.0	19.0	-0.1	265	31.3	31.2	2.8	257	36.1	35.2	8.2	260	16.9	16.7	2.9			
12	238	1.5	1.3	0.8	280	5.8	5.7	-1.0	289	12.2	11.5	-4.0	273	19.8	19.8	-0.9	257	32.8	32.0	7.3	255	36.7	35.5	9.2	266	20.3	20.3	1.4			
13	233	3.6	2.9	2.2	267	5.1	5.1	0.3	286	11.1	10.7	-3.0	274	19.7	19.6	-1.5	260	32.9	32.4	5.8	255	36.1	34.9	9.1	259	25.3	24.8	4.9			
14	259	3.6	3.5	0.7	284	6.1	5.9	-1.5	288	12.1	11.5	-3.8	285	19.9	19.3	-5.0	267	30.6	30.6	1.4	263	34.0	33.7	4.2	263	24.9	24.7	3.2			
15	272	3.2	3.2	-0.1	293	5.3	4.9	-2.1	292	13.4	12.4	-5.1	289	19.2	18.2	-6.1	278	29.8	29.5	-4.0	269	31.9	31.9	0.3	265	17.8	17.7	1.4			
16	294	3.6	3.3	-1.5	288	6.0	5.7	-1.9	293	14.5	13.3	-5.7	283	18.0	17.6	-4.0	271	31.0	31.0	-0.6	266	33.4	33.3	2.3	266	19.1	19.1	1.2			
17	283	2.7	2.6	-0.6	285	5.2	5.0	-1.3	294	13.7	12.5	-5.6	281	17.7	17.4	-3.5	271	31.3	31.3	-0.3	265	35.8	35.7	2.9	269	18.9	18.9	0.2			
18	279	4.0	4.0	-0.6	281	5.3	5.2	-1.0	293	12.3	11.3	-4.8	280	18.4	18.1	-3.2	275	32.3	32.2	-2.7	267	33.3	33.3	1.5	271	14.6	14.6	-0.2			
19	249	2.6	2.4	0.9	279	4.5	4.4	-0.7	291	13.0	12.2	-4.6	278	16.3	16.1	-2.4	267	31.1	31.1	1.5	262	34.7	34.4	4.8	267	17.7	17.7	1.0			
20	267	2.0	2.0	0.1	273	5.3	5.3	-0.3	290	12.6	11.8	-4.4	282	18.6	18.2	-4.0	267	30.8	30.8	1.7	265	35.8	35.7	2.9	265	18.0	17.9	1.5			
21	246	2.2	2.0	0.9	279	4.0	4.0	-0.6	291	12.0	11.2	-4.4	286	17.8	17.1	-4.9	269	29.4	29.4	0.3	260	32.8	32.3	5.6	264	17.6	17.5	1.9			
22	202	4.1	1.5	3.8	280	5.1	5.0	-0.9	291	12.1	11.3	-4.3	278	17.1	16.9	-2.4	277	30.4	30.2	-3.8	260	35.7	35.2	6.1	272	14.7	14.7	-0.5			
23	231	2.1	1.6	1.3	264	4.1	4.1	0.4	284	13.2	12.8	-3.2	285	17.5	16.9	-4.6	270	25.9	25.9	-0.1	259	27.6	27.1	5.3	270	15.1	15.1	-0.1			
24	210	4.0	2.0	3.5	260	4.8	4.7	0.8	280	10.5	10.3	-1.9	277	17.2	17.1	-2.2	264	28.3	28.1	3.2	259	31.3	30.7	5.9	272	18.1	18.1	-0.5			
25	237	2.4	2.0	1.3	272	3.7	3.7	-0.1	288	10.9	10.4	-3.3	271	15.5	15.5	-0.4	261	26.5	26.2	4.1	253	33.4	32.0	9.7	263	18.0	17.9	2.1			
26	216	3.4	2.0	2.8	253	4.5	4.3	1.3	276	10.0	10.0	-1.0	274	17.1	17.1	-1.1	265	27.1	27.0	2.5	259	37.3	36.7	6.9	276	17.1	17.0	-1.7			
27	223	1.9	1.3	1.4	280	4.5	4.4	-0.8	285	11.8	11.4	-3.0	282	15.3	15.0	-3.2	271	28.3	28.3	-0.3	261	31.9	31.5	5.0	263	15.6	15.5	1.9			
28	229	2.0	1.5	1.3	277	5.7	5.7	-0.7	294	12.0	10.9	-4.9	284	14.7	14.3	-3.6	271	26.0	26.0	-0.4	266	32.2	32.1	2.1	278	17.4	17.2	-2.3			
29	222	2.8	1.9	2.1	281	4.9	4.8	-0.9	289	10.8	10.2	-3.6	284	14.1	13.7	-3.3	272	23.5	23.5	-0.9	268	31.8	31.8	1.2	275	14.5	14.5	-1.2			
30	194	3.4	0.8	3.3	271	4.9	4.9	-0.1	292	11.8	11.0	-4.4	281	17.2	16.9	-3.3	272	26.6	26.6	-1.0	263	31.0	30.7	4.0	270	15.0	15.0	-0.1			
31	306	0.9	0.7	-0.5	278	4.9	4.8	-0.7	296	11.6	10.4	-5.1	284	16.4	15.9	-4.1	272	28.1	28.1	-1.2	268	31.9	31.9	1.1	275	14.9	14.9	-1.2			

Daily Normals of Upper Air Winds (1971-2000)

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KOLKATA

APRIL

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	208	1.9	0.9	1.7	264	4.9	4.9	0.5	292	10.7	9.9	-4.1	281	16.7	16.4	-3.2	268	29.3	29.3	0.9	268	33.0	33.0	1.4	275	16.3	16.2	-1.5			
2	209	3.1	1.5	2.7	280	5.2	5.1	-0.9	289	11.1	10.5	-3.6	278	17.0	16.8	-2.5	273	30.3	30.2	-1.8	271	34.2	34.2	-0.5	269	16.5	16.5	0.3			
3	225	3.1	2.2	2.2	274	4.4	4.4	-0.3	290	10.9	10.2	-3.8	278	17.1	16.9	-2.4	268	28.2	28.2	1.1	265	30.4	30.3	2.4	273	12.9	12.9	-0.6			
4	218	3.6	2.2	2.8	274	3.9	3.9	-0.3	289	11.3	10.7	-3.7	277	15.6	15.5	-1.9	268	32.3	32.3	1.1	264	35.7	35.5	3.9	275	12.3	12.3	-1.0			
5	207	2.8	1.3	2.5	276	3.8	3.8	-0.4	291	11.6	10.9	-4.1	279	15.3	15.1	-2.5	267	28.1	28.1	1.4	267	33.1	33.0	1.9	272	15.0	15.0	-0.6			
6	260	2.7	2.7	0.5	292	4.8	4.5	-1.8	291	11.6	10.9	-4.1	284	16.5	16.0	-4.1	273	25.8	25.8	-1.2	274	31.0	30.9	-2.3	270	15.6	15.6	0.0			
7	218	3.3	2.0	2.6	275	4.7	4.7	-0.4	289	11.9	11.3	-3.8	286	14.7	14.1	-4.0	272	26.9	26.9	-1.1	268	30.8	30.8	1.1	262	13.7	13.6	1.8			
8	219	3.5	2.2	2.7	273	5.3	5.3	-0.3	294	11.8	10.8	-4.7	286	15.7	15.1	-4.4	274	29.8	29.7	-2.3	266	35.4	35.3	2.5	258	17.0	16.6	3.5			
9	215	4.5	2.6	3.7	257	4.9	4.8	1.1	288	10.9	10.4	-3.4	283	16.1	15.7	-3.7	275	27.5	27.4	-2.5	266	33.0	32.9	2.3	270	14.5	14.5	0.0			
10	217	3.1	1.9	2.5	264	4.6	4.6	0.5	282	10.9	10.7	-2.3	276	16.5	16.4	-1.8	269	26.0	26.0	0.4	262	31.5	31.2	4.4	271	13.1	13.1	-0.2			
11	211	4.1	2.1	3.5	262	4.9	4.8	0.7	291	12.2	11.4	-4.3	282	16.2	15.8	-3.5	273	27.3	27.3	-1.3	270	32.2	32.2	0.2	275	14.8	14.8	-1.2			
12	207	2.5	1.1	2.2	282	4.5	4.4	-0.9	293	12.1	11.1	-4.8	288	16.9	16.1	-5.2	281	28.1	27.6	-5.2	270	29.5	29.5	-0.1	266	14.5	14.5	0.9			
13	191	2.6	0.5	2.6	269	4.2	4.2	0.1	289	11.1	10.5	-3.6	286	15.2	14.6	-4.3	274	25.7	25.6	-2.0	270	28.5	28.5	-0.1	275	15.5	15.4	-1.4			
14	198	3.6	1.1	3.4	260	3.9	3.8	0.7	295	10.5	9.5	-4.5	287	13.5	12.9	-3.9	272	26.1	26.1	-1.0	268	28.5	28.5	0.8	266	11.7	11.7	0.8			
15	216	3.4	2.0	2.8	256	4.2	4.1	1.0	293	8.6	7.9	-3.4	276	12.2	12.1	-1.3	269	27.3	27.3	0.5	266	32.8	32.7	2.2	266	13.4	13.4	0.9			
16	214	5.0	2.8	4.1	255	5.0	4.8	1.3	286	11.2	10.8	-3.1	279	15.3	15.1	-2.3	266	27.5	27.4	1.7	262	30.1	29.8	4.4	263	12.4	12.3	1.5			
17	210	4.8	2.4	4.2	253	4.4	4.2	1.3	285	10.6	10.2	-2.7	283	14.7	14.3	-3.2	266	26.7	26.6	1.8	259	29.9	29.3	5.9	272	7.5	7.5	-0.2			
18	207	4.6	2.1	4.1	271	5.4	5.4	-0.1	287	11.2	10.7	-3.2	276	15.8	15.7	-1.7	266	25.4	25.3	1.7	257	31.0	30.2	6.8	252	12.2	11.6	3.7			
19	210	6.1	3.1	5.3	269	4.6	4.6	0.1	290	10.8	10.1	-3.7	282	13.2	12.9	-2.8	270	25.5	25.5	-0.2	262	26.1	25.9	3.5	271	9.3	9.3	-0.1			
20	216	5.3	3.1	4.3	259	4.3	4.2	0.8	294	10.2	9.3	-4.2	285	14.4	13.9	-3.8	266	24.2	24.2	1.5	257	31.8	31.0	7.3	269	12.3	12.3	0.2			
21	207	6.3	2.9	5.6	259	5.4	5.3	1.0	295	10.9	9.9	-4.6	288	12.4	11.8	-3.8	270	20.7	20.7	0.1	260	27.2	26.8	4.7	265	9.9	9.9	0.9			
22	197	4.5	1.3	4.3	263	3.9	3.9	0.5	289	10.2	9.6	-3.3	280	11.1	10.9	-2.0	265	22.0	21.9	2.0	261	27.2	26.8	4.4	278	10.2	10.1	-1.4			
23	198	5.1	1.6	4.8	261	5.1	5.0	0.8	295	9.9	9.0	-4.2	286	13.0	12.5	-3.5	274	24.0	23.9	-1.8	265	28.0	27.9	2.2	263	11.0	10.9	1.3			
24	200	7.0	2.4	6.6	247	4.3	4.0	1.7	294	9.4	8.6	-3.9	281	12.4	12.2	-2.3	265	22.8	22.7	1.8	258	24.6	24.0	5.2	267	8.0	8.0	0.4			
25	190	5.5	1.0	5.4	245	4.4	4.0	1.9	288	9.2	8.8	-2.8	274	12.9	12.9	-1.0	263	20.7	20.5	2.6	261	22.7	22.4	3.4	279	8.5	8.4	-1.3			
26	188	6.6	0.9	6.5	254	3.5	3.4	1.0	291	9.3	8.7	-3.3	289	12.2	11.5	-4.0	267	20.7	20.7	1.1	254	22.9	22.0	6.2	272	9.5	9.5	-0.4			
27	189	5.7	0.9	5.6	257	4.6	4.5	1.0	295	9.3	8.4	-4.0	288	11.5	10.9	-3.6	262	18.2	18.0	2.4	256	22.3	21.7	5.3	271	8.0	8.0	-0.1			
28	187	6.2	0.8	6.1	259	4.6	4.5	0.9	297	9.5	8.5	-4.3	284	10.9	10.6	-2.6	269	18.6	18.6	0.2	264	20.0	19.9	2.2	276	7.0	7.0	-0.7			
29	213	4.5	2.5	3.8	261	4.5	4.4	0.7	295	9.4	8.5	-4.0	293	11.5	10.6	-4.4	265	19.8	19.7	1.6	266	23.5	23.4	1.8	255	7.3	7.0	1.9			
30	201	5.8	2.1	5.4	269	4.4	4.4	0.1	302	11.1	9.4	-5.9	297	14.2	12.6	-6.5	273	21.0	21.0	-1.0	267	21.4	21.4	1.3	272	6.9	6.9	-0.3			

Daily Normals of Upper Air Winds (1971-2000)

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KOLKATA

MAY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	206	5.3	2.3	4.8	259	4.8	4.7	0.9	300	10.3	9.0	-5.1	293	11.9	11.0	-4.6	272	20.2	20.2	-0.6	264	20.8	20.7	2.3	268	6.5	6.5	0.2			
2	199	5.7	1.9	5.4	254	4.0	3.8	1.1	295	10.3	9.4	-4.3	290	11.9	11.2	-4.1	269	20.0	20.0	0.5	260	21.6	21.2	3.9	262	4.3	4.3	0.6			
3	198	6.1	1.9	5.8	260	4.1	4.0	0.7	290	9.2	8.7	-3.1	287	11.7	11.2	-3.5	267	21.3	21.3	1.1	267	19.3	19.3	1.1	280	7.2	7.1	-1.2			
4	192	5.8	1.2	5.7	251	3.6	3.4	1.2	291	8.5	7.9	-3.1	284	11.3	11.0	-2.7	264	21.8	21.7	2.2	265	22.4	22.3	2.0	271	9.0	9.0	-0.1			
5	187	4.7	0.6	4.7	244	3.9	3.5	1.7	298	9.8	8.6	-4.6	297	12.7	11.3	-5.7	267	19.7	19.7	1.2	257	19.5	19.0	4.5	268	5.5	5.5	0.2			
6	198	5.5	1.7	5.2	260	2.9	2.9	0.5	297	9.3	8.3	-4.3	292	10.8	10.0	-4.0	268	17.3	17.3	0.5	259	20.4	20.0	4.0	265	4.3	4.3	0.4			
7	185	4.5	0.4	4.5	258	2.4	2.3	0.5	307	10.4	8.3	-6.3	290	9.4	8.8	-3.2	265	18.4	18.3	1.7	255	20.9	20.2	5.5	221	5.3	3.5	4.0			
8	214	4.7	2.6	3.9	266	4.1	4.1	0.3	297	9.2	8.2	-4.1	285	11.0	10.6	-2.9	269	17.2	17.2	0.4	258	20.6	20.1	4.4	266	4.6	4.6	0.3			
9	193	4.4	1.0	4.3	247	4.0	3.7	1.6	284	9.8	9.5	-2.4	290	12.5	11.7	-4.3	267	17.6	17.6	1.0	263	19.3	19.2	2.3	266	6.4	6.4	0.5			
10	193	2.3	0.5	2.2	242	4.0	3.5	1.9	287	8.3	7.9	-2.4	281	11.2	11.0	-2.2	260	15.7	15.5	2.6	258	19.1	18.7	4.0	265	3.4	3.4	0.3			
11	185	4.2	0.4	4.2	235	4.0	3.3	2.3	291	8.4	7.8	-3.0	274	10.6	10.6	-0.8	262	18.0	17.8	2.4	261	17.4	17.2	2.6	310	3.0	2.3	-1.9			
12	183	4.1	0.2	4.1	233	3.8	3.0	2.3	291	6.5	6.1	-2.3	296	9.3	8.4	-4.1	262	18.0	17.8	2.4	255	16.7	16.1	4.4	214	0.7	0.4	0.6			
13	192	4.0	0.8	3.9	236	4.5	3.7	2.5	290	8.1	7.6	-2.7	283	7.8	7.6	-1.7	268	13.9	13.9	0.5	264	13.6	13.5	1.4	284	3.3	3.2	-0.8			
14	201	5.6	2.0	5.2	232	4.3	3.4	2.7	299	7.8	6.8	-3.8	289	8.7	8.2	-2.8	263	13.1	13.0	1.7	255	13.5	13.0	3.6	207	2.7	1.2	2.4			
15	185	6.3	0.6	6.3	238	3.6	3.1	1.9	302	7.5	6.3	-4.0	289	9.3	8.8	-3.1	261	12.8	12.7	1.9	258	11.8	11.5	2.5	145	1.9	-1.1	1.6			
16	196	5.0	1.4	4.8	261	3.6	3.6	0.6	301	9.3	8.0	-4.8	296	10.1	9.1	-4.4	254	13.4	12.9	3.8	248	13.6	12.6	5.0	140	1.6	-1.0	1.2			
17	189	7.3	1.1	7.2	247	4.4	4.1	1.7	304	8.8	7.3	-4.9	284	9.1	8.8	-2.2	255	12.4	12.0	3.3	252	13.9	13.3	4.2	275	2.3	2.3	-0.2			
18	212	3.1	1.6	2.6	281	3.1	3.0	-0.6	301	9.6	8.3	-4.9	290	9.4	8.8	-3.2	257	10.9	10.6	2.5	245	12.0	10.9	5.1	151	1.8	-0.9	1.6			
19	141	4.5	-2.8	3.5	244	3.2	2.9	1.4	301	7.5	6.4	-3.9	300	10.0	8.7	-5.0	262	11.4	11.3	1.5	245	10.5	9.5	4.4	90	2.4	-2.4	0.0			
20	180	4.9	0.0	4.9	247	3.4	3.1	1.3	302	8.2	7.0	-4.3	290	9.4	8.8	-3.2	261	11.0	10.9	1.7	243	10.5	9.4	4.7	243	1.8	1.6	0.8			
21	197	3.1	0.9	3.0	260	2.3	2.3	0.4	311	7.9	5.9	-5.2	281	9.1	8.9	-1.7	248	10.4	9.6	3.9	227	11.3	8.3	7.7	148	1.3	-0.7	1.1			
22	177	4.5	-0.2	4.5	258	1.9	1.9	0.4	309	7.2	5.6	-4.5	280	8.3	8.2	-1.5	255	10.5	10.1	2.7	237	12.6	10.5	6.9	163	1.7	-0.5	1.6			
23	193	2.6	0.6	2.5	232	2.3	1.8	1.4	310	8.0	6.1	-5.1	285	7.3	7.1	-1.9	248	11.3	10.5	4.2	233	12.8	10.2	7.8	182	2.7	0.1	2.7			
24	188	5.6	0.8	5.5	249	2.6	2.4	0.9	307	7.1	5.7	-4.3	291	8.2	7.7	-2.9	251	11.6	11.0	3.7	234	10.5	8.5	6.2	145	3.3	-1.9	2.7			
25	189	3.8	0.6	3.8	262	2.9	2.9	0.4	312	7.2	5.4	-4.8	302	7.0	5.9	-3.7	250	10.5	9.9	3.6	226	9.5	6.8	6.6	126	2.4	-1.9	1.4			
26	179	4.0	-0.1	4.0	233	3.1	2.5	1.9	309	6.2	4.8	-3.9	293	5.0	4.6	-2.0	248	8.7	8.0	3.3	231	8.5	6.6	5.3	135	3.3	-2.3	2.3			
27	190	5.7	1.0	5.6	258	3.4	3.3	0.7	294	7.8	7.1	-3.2	291	7.7	7.2	-2.8	257	7.8	7.6	1.8	239	8.8	7.6	4.5	135	2.5	-1.8	1.8			
28	170	4.2	-0.7	4.1	242	4.2	3.7	2.0	301	7.1	6.1	-3.7	296	7.7	6.9	-3.4	251	8.4	8.0	2.7	235	7.4	6.1	4.2	98	4.2	-4.2	0.6			
29	218	2.3	1.4	1.8	264	4.0	4.0	0.4	306	8.0	6.5	-4.7	295	9.9	9.0	-4.2	247	7.6	7.0	3.0	222	7.9	5.3	5.9	114	4.4	-4.0	1.8			
30	219	5.8	3.6	4.5	256	3.7	3.6	0.9	309	8.8	6.8	-5.6	291	7.8	7.3	-2.8	255	7.2	6.9	1.9	223	6.4	4.4	4.7	98	6.7	-6.6	0.9			
31	198	4.6	1.4	4.4	260	3.5	3.4	0.6	313	8.3	6.1	-5.7	305	7.0	5.7	-4.0	261	5.9	5.8	0.9	225	6.1	4.3	4.3	106	8.2	-7.9	2.3			

Daily Normals of Upper Air Winds (1971-2000)

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KOLKATA

JUNE

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	173	4.7	-0.6	4.7	261	1.8	1.8	0.3	309	7.9	6.1	-5.0	299	7.0	6.1	-3.4	262	6.5	6.4	0.9	224	6.2	4.3	4.4	97	8.3	-8.2	1.0			
2	181	6.1	0.1	6.1	260	1.7	1.7	0.3	322	6.8	4.2	-5.4	291	5.8	5.4	-2.1	249	5.0	4.7	1.8	209	4.8	2.3	4.2	92	6.8	-6.8	0.2			
3	187	7.1	0.9	7.0	180	1.1	0.0	1.1	317	4.9	3.3	-3.6	281	4.9	4.8	-0.9	246	5.2	4.8	2.1	216	5.1	3.0	4.1	110	8.4	-7.9	2.8			
4	174	6.2	-0.6	6.2	238	2.2	1.9	1.2	317	5.3	3.6	-3.9	295	5.1	4.6	-2.1	238	4.9	4.1	2.6	216	5.1	3.0	4.1	107	7.6	-7.3	2.2			
5	182	5.8	0.2	5.8	202	2.4	0.9	2.2	294	5.4	4.9	-2.2	285	5.1	4.9	-1.3	232	5.6	4.4	3.4	195	4.3	1.1	4.2	76	6.4	-6.2	-1.5			
6	189	6.9	1.1	6.8	224	4.5	3.1	3.2	309	6.2	4.8	-3.9	276	4.4	4.4	-0.5	243	4.7	4.2	2.1	257	1.8	1.8	0.4	87	8.8	-8.8	-0.4			
7	203	6.1	2.4	5.6	238	4.7	4.0	2.5	301	6.5	5.6	-3.3	285	5.1	4.9	-1.3	270	1.4	1.4	0.0	162	0.6	-0.2	0.6	85	10.8	-10.8	-1.0			
8	189	6.3	1.0	6.2	224	3.5	2.4	2.5	279	4.3	4.2	-0.7	292	4.1	3.8	-1.5	250	3.2	3.0	1.1	138	1.3	-0.9	1.0	69	10.7	-10.0	-3.8			
9	191	6.8	1.3	6.7	226	3.5	2.5	2.4	281	4.6	4.5	-0.9	277	4.0	4.0	-0.5	266	1.5	1.5	0.1	149	1.2	-0.6	1.0	80	10.1	-10.0	-1.7			
10	159	3.6	-1.3	3.4	195	2.3	0.6	2.2	312	3.0	2.2	-2.0	244	2.8	2.5	1.2	194	0.4	0.1	0.4	93	3.9	-3.9	0.2	79	11.7	-11.5	-2.2			
11	208	4.7	2.2	4.1	228	2.8	2.1	1.9	291	4.7	4.4	-1.7	245	1.7	1.5	0.7	243	1.3	1.2	0.6	110	5.5	-5.2	1.9	85	15.0	-14.9	-1.4			
12	192	7.2	1.5	7.0	200	3.8	1.3	3.6	275	2.3	2.3	-0.2	284	0.8	0.8	-0.2	256	0.8	0.8	0.2	108	4.7	-4.5	1.5	78	12.2	-11.9	-2.5			
13	168	4.9	-1.0	4.8	184	2.8	0.2	2.8	303	1.7	1.4	-0.9	207	0.9	0.4	0.8	163	1.7	-0.5	1.6	93	4.1	-4.1	0.2	79	11.8	-11.6	-2.3			
14	164	5.3	-1.5	5.1	184	2.8	0.2	2.8	266	1.6	1.6	0.1	153	1.3	-0.6	1.2	140	2.5	-1.6	1.9	94	5.8	-5.8	0.4	84	14.6	-14.5	-1.6			
15	157	5.1	-2.0	4.7	182	2.7	0.1	2.7	239	0.6	0.5	0.3	191	0.5	0.1	0.5	147	2.0	-1.1	1.7	103	6.3	-6.1	1.4	75	15.1	-14.6	-3.9			
16	162	4.0	-1.2	3.8	201	1.7	0.6	1.6	273	2.2	2.2	-0.1	270	1.0	1.0	0.0	111	1.7	-1.6	0.6	109	5.3	-5.0	1.7	78	14.6	-14.3	-3.1			
17	164	5.0	-1.4	4.8	184	2.9	0.2	2.9	243	1.8	1.6	0.8	263	0.8	0.8	0.1	110	2.0	-1.9	0.7	95	5.4	-5.4	0.5	78	16.1	-15.8	-3.3			
18	182	5.0	0.2	5.0	192	2.4	0.5	2.3	245	2.1	1.9	0.9	162	0.9	-0.3	0.9	94	2.6	-2.6	0.2	96	8.2	-8.2	0.9	76	16.5	-16.0	-4.0			
19	198	6.0	1.9	5.7	198	2.9	0.9	2.8	262	0.7	0.7	0.1	167	0.9	-0.2	0.9	115	4.5	-4.1	1.9	83	6.9	-6.9	-0.8	74	15.9	-15.3	-4.5			
20	200	3.2	1.1	3.0	200	1.2	0.4	1.1	315	0.7	0.5	-0.5	120	0.8	-0.7	0.4	111	4.7	-4.4	1.7	96	8.1	-8.0	0.9	75	16.1	-15.6	-4.1			
21	190	5.6	1.0	5.5	179	4.0	-0.1	4.0	192	1.9	0.4	1.9	130	1.7	-1.3	1.1	108	4.1	-3.9	1.3	85	8.1	-8.1	-0.7	78	18.4	-18.0	-3.8			
22	197	6.8	2.0	6.5	199	4.6	1.5	4.4	213	3.1	1.7	2.6	158	2.4	-0.9	2.2	114	5.1	-4.7	2.1	81	7.2	-7.1	-1.1	75	18.2	-17.6	-4.6			
23	204	5.8	2.4	5.3	199	3.9	1.3	3.7	225	1.8	1.3	1.3	215	1.6	0.9	1.3	103	4.5	-4.4	1.0	94	9.0	-9.0	0.7	76	16.8	-16.3	-4.1			
24	224	3.2	2.2	2.3	217	3.1	1.9	2.5	214	2.2	1.2	1.8	63	0.4	-0.4	-0.2	95	4.2	-4.2	0.4	75	8.4	-8.1	-2.2	75	18.4	-17.8	-4.7			
25	199	5.0	1.6	4.7	218	3.9	2.4	3.1	258	3.3	3.2	0.7	350	1.1	0.2	-1.1	90	4.9	-4.9	0.0	89	9.8	-9.8	-0.1	72	19.8	-18.8	-6.1			
26	177	3.7	-0.2	3.7	184	3.1	0.2	3.1	231	1.4	1.1	0.9	127	2.5	-2.0	1.5	99	7.5	-7.4	1.2	90	9.8	-9.8	0.0	73	20.2	-19.3	-5.8			
27	185	7.1	0.6	7.1	189	5.8	0.9	5.7	192	3.8	0.8	3.7	153	2.9	-1.3	2.6	116	5.8	-5.2	2.5	81	9.5	-9.4	-1.5	69	19.5	-18.2	-7.1			
28	202	8.2	3.0	7.6	202	5.1	1.9	4.7	214	3.6	2.0	3.0	188	2.9	0.4	2.9	97	5.6	-5.6	0.7	84	10.0	-10.0	-1.0	64	21.7	-19.5	-9.6			
29	192	6.7	1.4	6.6	195	4.7	1.2	4.5	212	3.1	1.6	2.6	151	1.0	-0.5	0.9	92	5.8	-5.8	0.2	85	9.7	-9.7	-0.8	70	21.1	-19.8	-7.2			
30	219	3.8	2.4	3.0	232	4.2	3.3	2.6	238	3.6	3.0	1.9	135	0.6	-0.4	0.4	111	4.7	-4.4	1.7	82	10.1	-10.0	-1.4	69	22.9	-21.4	-8.2			

Daily Normals of Upper Air Winds (1971-2000)

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KOLKATA

JULY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	193	3.9	0.9	3.8	226	2.8	2.0	1.9	240	2.0	1.7	1.0	148	1.5	-0.8	1.3	99	5.6	-5.5	0.9	80	10.6	-10.4	-1.8	73	20.5	-19.6	-6.1			
2	175	3.7	-0.3	3.7	217	3.0	1.8	2.4	261	2.0	2.0	0.3	104	1.6	-1.6	0.4	87	6.8	-6.8	-0.4	86	11.3	-11.3	-0.7	87	21.6	-21.6	-1.3			
3	189	6.1	1.0	6.0	231	3.2	2.5	2.0	251	3.4	3.2	1.1	180	2.6	0.0	2.6	101	7.6	-7.4	1.5	93	10.5	-10.5	0.5	78	21.5	-21.0	-4.6			
4	195	5.8	1.5	5.6	195	3.1	0.8	3.0	225	1.7	1.2	1.2	124	0.7	-0.6	0.4	88	7.4	-7.4	-0.2	79	11.3	-11.1	-2.1	77	22.3	-21.7	-5.2			
5	202	6.3	2.4	5.8	197	3.1	0.9	3.0	222	1.3	0.9	1.0	77	1.3	-1.3	-0.3	97	5.7	-5.7	0.7	77	12.7	-12.4	-2.9	81	23.3	-23.0	-3.6			
6	198	6.8	2.1	6.5	193	3.7	0.8	3.6	212	1.3	0.7	1.1	140	2.3	-1.5	1.8	88	7.5	-7.5	-0.3	80	13.8	-13.6	-2.4	81	23.9	-23.6	-3.7			
7	192	5.9	1.2	5.8	192	4.4	0.9	4.3	189	2.0	0.3	2.0	129	4.3	-3.3	2.7	93	8.0	-8.0	0.4	81	11.8	-11.7	-1.8	76	23.9	-23.2	-5.8			
8	192	5.1	1.1	5.0	190	3.5	0.6	3.4	175	2.2	-0.2	2.2	114	2.2	-2.0	0.9	99	8.0	-7.9	1.3	88	11.1	-11.1	-0.3	79	24.7	-24.2	-4.9			
9	221	4.3	2.8	3.2	210	3.0	1.5	2.6	225	1.6	1.1	1.1	110	3.3	-3.1	1.1	99	8.7	-8.6	1.3	87	14.8	-14.8	-0.9	79	23.7	-23.3	-4.5			
10	207	5.1	2.3	4.5	212	3.8	2.0	3.2	191	1.6	0.3	1.6	113	3.6	-3.3	1.4	91	9.1	-9.1	0.2	79	15.2	-14.9	-2.8	77	24.4	-23.8	-5.4			
11	176	4.6	-0.3	4.6	174	3.8	-0.4	3.8	178	2.6	-0.1	2.6	127	3.6	-2.9	2.2	101	8.5	-8.3	1.6	81	12.3	-12.2	-1.9	79	23.7	-23.3	-4.6			
12	179	5.2	-0.1	5.2	179	4.4	-0.1	4.4	180	4.0	0.0	4.0	127	4.4	-3.5	2.6	103	8.3	-8.1	1.9	84	12.9	-12.8	-1.3	79	25.4	-24.9	-5.0			
13	193	4.4	1.0	4.3	184	4.3	0.3	4.3	187	3.2	0.4	3.2	140	3.1	-2.0	2.4	94	8.1	-8.1	0.5	80	15.2	-15.0	-2.6	78	23.2	-22.7	-4.8			
14	167	6.6	-1.5	6.4	184	5.4	0.4	5.4	171	3.6	-0.6	3.6	118	3.6	-3.2	1.7	92	7.0	-7.0	0.2	70	10.7	-10.1	-3.6	79	21.5	-21.1	-4.2			
15	178	7.0	-0.3	7.0	179	4.9	-0.1	4.9	182	3.6	0.1	3.6	140	2.5	-1.6	1.9	87	5.9	-5.9	-0.3	74	12.3	-11.8	-3.4	70	22.1	-20.8	-7.5			
16	176	5.4	-0.4	5.4	189	5.1	0.8	5.0	180	2.8	0.0	2.8	127	2.1	-1.7	1.3	90	7.8	-7.8	0.0	80	12.5	-12.3	-2.2	78	24.0	-23.5	-5.1			
17	166	5.3	-1.3	5.1	175	4.7	-0.4	4.7	170	3.6	-0.6	3.5	137	2.5	-1.7	1.8	98	7.1	-7.0	1.0	76	10.8	-10.5	-2.7	74	23.6	-22.7	-6.6			
18	188	5.6	0.8	5.5	181	4.2	0.1	4.2	191	3.2	0.6	3.1	157	2.5	-1.0	2.3	88	5.9	-5.9	-0.2	76	10.9	-10.6	-2.6	75	23.2	-22.4	-6.1			
19	195	6.0	1.6	5.8	200	4.0	1.4	3.8	203	2.3	0.9	2.1	106	3.2	-3.1	0.9	69	6.3	-5.9	-2.3	68	11.1	-10.3	-4.1	77	25.5	-24.9	-5.6			
20	186	5.0	0.5	5.0	193	4.1	0.9	4.0	182	2.3	0.1	2.3	97	2.5	-2.5	0.3	93	9.0	-9.0	0.5	78	12.2	-11.9	-2.6	80	24.9	-24.5	-4.3			
21	205	5.4	2.3	4.9	185	4.7	0.4	4.7	190	2.8	0.5	2.8	123	2.4	-2.0	1.3	89	8.3	-8.3	-0.1	76	12.8	-12.4	-3.1	77	25.8	-25.2	-5.7			
22	195	5.9	1.5	5.7	199	4.9	1.6	4.6	203	3.6	1.4	3.3	125	2.4	-2.0	1.4	95	7.4	-7.4	0.6	73	13.9	-13.3	-4.0	77	24.2	-23.6	-5.3			
23	217	4.6	2.8	3.7	222	3.9	2.6	2.9	220	2.6	1.7	2.0	92	2.3	-2.3	0.1	86	7.8	-7.8	-0.5	79	14.7	-14.4	-2.8	78	23.5	-23.0	-4.8			
24	194	3.8	0.9	3.7	208	4.2	2.0	3.7	198	2.5	0.8	2.4	81	3.0	-3.0	-0.5	88	8.6	-8.6	-0.3	68	15.2	-14.1	-5.7	83	24.6	-24.4	-3.2			
25	166	3.8	-0.9	3.7	202	3.7	1.4	3.4	203	1.3	0.5	1.2	101	1.5	-1.5	0.3	90	8.2	-8.2	0.0	79	14.0	-13.8	-2.6	82	25.0	-24.7	-3.6			
26	138	3.6	-2.4	2.7	195	4.1	1.1	4.0	196	1.9	0.5	1.8	70	2.3	-2.2	-0.8	78	7.8	-7.6	-1.6	77	13.5	-13.1	-3.1	76	26.1	-25.4	-6.2			
27	162	4.8	-1.5	4.6	197	3.4	1.0	3.3	190	2.2	0.4	2.2	109	2.4	-2.3	0.8	95	8.2	-8.2	0.7	80	13.9	-13.7	-2.5	79	24.8	-24.3	-4.9			
28	184	4.0	0.3	4.0	192	4.7	1.0	4.6	208	3.6	1.7	3.2	132	3.1	-2.3	2.1	91	10.0	-10.0	0.1	79	14.6	-14.3	-2.7	74	26.0	-25.0	-7.1			
29	169	4.9	-0.9	4.8	198	4.0	1.2	3.8	188	2.7	0.4	2.7	107	3.1	-3.0	0.9	87	9.2	-9.2	-0.5	75	16.8	-16.2	-4.3	80	28.5	-28.0	-5.1			
30	173	4.8	-0.6	4.8	201	3.1	1.1	2.9	193	1.8	0.4	1.8	77	3.2	-3.1	-0.7	85	10.0	-10.0	-0.9	74	17.2	-16.5	-4.8	78	27.8	-27.2	-5.9			
31	202	2.7	1.0	2.5	171	3.0	-0.5	3.0	141	2.2	-1.4	1.7	83	2.6	-2.6	-0.3	78	9.7	-9.5	-2.1	74	15.4	-14.8	-4.2	72	26.0	-24.7	-8.1			

Daily Normals of Upper Air Winds (1971-2000)

200

KOLKATA

AUGUST

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	168	4.9	-1.0	4.8	160	4.1	-1.4	3.9	135	2.5	-1.8	1.8	100	3.6	-3.5	0.6	84	9.0	-8.9	-1.0	75	14.8	-14.3	-3.8	78	24.9	-24.3	-5.3			
2	174	3.7	-0.4	3.7	157	3.6	-1.4	3.3	145	2.8	-1.6	2.3	83	3.3	-3.3	-0.4	81	8.5	-8.4	-1.4	73	14.5	-13.8	-4.3	73	23.9	-22.8	-7.1			
3	185	6.1	0.5	6.1	181	5.1	0.1	5.1	176	3.9	-0.3	3.9	115	2.6	-2.4	1.1	92	7.1	-7.1	0.3	75	11.1	-10.7	-2.9	81	23.0	-22.7	-3.4			
4	196	2.6	0.7	2.5	189	3.6	0.6	3.6	173	2.6	-0.3	2.6	105	2.3	-2.2	0.6	88	7.2	-7.2	-0.2	84	11.1	-11.0	-1.1	73	22.7	-21.7	-6.5			
5	204	5.5	2.2	5.0	195	3.0	0.8	2.9	167	1.7	-0.4	1.7	95	3.8	-3.8	0.3	91	8.4	-8.4	0.1	77	10.6	-10.3	-2.3	81	20.7	-20.4	-3.4			
6	198	3.3	1.0	3.1	162	4.0	-1.2	3.8	129	3.3	-2.6	2.1	110	5.0	-4.7	1.7	100	9.1	-9.0	1.6	83	10.3	-10.2	-1.3	77	20.5	-20.0	-4.5			
7	211	5.2	2.7	4.5	162	4.1	-1.3	3.9	122	4.4	-3.7	2.3	109	5.7	-5.4	1.9	91	8.2	-8.2	0.1	82	14.6	-14.5	-2.0	79	25.0	-24.5	-4.9			
8	195	5.0	1.3	4.8	177	4.3	-0.2	4.3	153	3.8	-1.7	3.4	111	5.1	-4.8	1.8	96	9.4	-9.3	1.0	82	13.5	-13.4	-1.9	77	24.9	-24.3	-5.4			
9	159	5.3	-1.9	4.9	171	5.0	-0.8	4.9	155	3.8	-1.6	3.4	118	3.6	-3.2	1.7	90	9.6	-9.6	0.0	77	12.3	-12.0	-2.8	76	24.2	-23.5	-5.8			
10	145	5.9	-3.4	4.8	173	3.5	-0.4	3.5	164	2.9	-0.8	2.8	93	3.4	-3.4	0.2	84	9.5	-9.4	-1.0	79	14.7	-14.4	-2.9	74	24.9	-24.0	-6.7			
11	196	4.6	1.3	4.4	163	2.7	-0.8	2.6	126	1.7	-1.4	1.0	79	3.6	-3.5	-0.7	84	8.5	-8.5	-0.9	74	12.4	-11.9	-3.4	76	23.6	-22.9	-5.8			
12	219	5.1	3.2	4.0	155	2.6	-1.1	2.4	146	2.5	-1.4	2.1	79	3.8	-3.7	-0.7	85	7.7	-7.7	-0.7	71	10.7	-10.1	-3.5	78	19.8	-19.3	-4.2			
13	212	4.6	2.4	3.9	180	3.4	0.0	3.4	167	1.7	-0.4	1.7	120	2.4	-2.1	1.2	97	7.9	-7.8	0.9	78	12.3	-12.0	-2.6	82	22.3	-22.1	-3.1			
14	175	3.8	-0.3	3.8	167	4.3	-1.0	4.2	143	3.8	-2.3	3.0	96	4.7	-4.7	0.5	88	8.9	-8.9	-0.3	86	13.9	-13.9	-1.0	79	20.9	-20.5	-3.9			
15	192	2.9	0.6	2.8	170	5.5	-1.0	5.4	155	3.8	-1.6	3.5	117	4.0	-3.6	1.8	100	8.2	-8.1	1.5	82	12.9	-12.8	-1.8	80	20.8	-20.5	-3.6			
16	156	4.5	-1.8	4.1	176	4.2	-0.3	4.2	166	3.6	-0.9	3.5	125	3.2	-2.6	1.8	91	6.7	-6.7	0.1	83	12.8	-12.7	-1.5	81	21.8	-21.5	-3.3			
17	162	5.9	-1.8	5.6	158	4.3	-1.6	4.0	129	2.8	-2.2	1.8	90	5.0	-5.0	0.0	87	7.7	-7.7	-0.4	79	11.3	-11.1	-2.1	81	23.2	-22.9	-3.5			
18	162	6.4	-2.0	6.1	170	4.2	-0.7	4.1	159	3.4	-1.2	3.2	99	3.9	-3.9	0.6	87	7.5	-7.5	-0.4	76	11.4	-11.1	-2.7	81	20.7	-20.4	-3.4			
19	179	5.8	-0.1	5.8	184	4.0	0.3	4.0	166	3.2	-0.8	3.1	122	3.9	-3.3	2.1	98	8.3	-8.2	1.2	83	10.1	-10.0	-1.2	81	22.2	-21.9	-3.5			
20	178	4.9	-0.2	4.9	176	4.3	-0.3	4.3	154	3.4	-1.5	3.1	107	4.2	-4.0	1.2	95	7.8	-7.8	0.7	80	13.5	-13.3	-2.4	79	23.7	-23.3	-4.4			
21	186	6.5	0.7	6.5	169	4.8	-0.9	4.7	159	3.9	-1.4	3.6	115	2.6	-2.4	1.1	98	6.1	-6.0	0.8	78	12.2	-11.9	-2.5	81	19.9	-19.7	-3.1			
22	193	4.6	1.0	4.5	181	4.3	0.1	4.3	175	3.4	-0.3	3.4	127	3.4	-2.7	2.0	102	8.0	-7.8	1.6	82	12.7	-12.6	-1.7	82	24.0	-23.8	-3.4			
23	196	5.7	1.6	5.5	202	5.0	1.9	4.6	188	3.4	0.5	3.4	106	1.8	-1.7	0.5	95	7.3	-7.3	0.6	73	12.7	-12.1	-3.7	81	22.6	-22.3	-3.6			
24	190	3.5	0.6	3.4	207	3.5	1.6	3.1	195	3.0	0.8	2.9	60	0.8	-0.7	-0.4	90	6.0	-6.0	0.0	83	12.3	-12.2	-1.5	80	21.7	-21.4	-3.6			
25	188	3.0	0.4	3.0	189	1.3	0.2	1.3	79	1.0	-1.0	-0.2	93	3.8	-3.8	0.2	94	6.9	-6.9	0.5	82	11.8	-11.7	-1.6	81	20.0	-19.8	-3.0			
26	148	5.7	-3.0	4.8	143	3.1	-1.9	2.5	108	2.8	-2.7	0.9	99	4.9	-4.8	0.8	91	8.9	-8.9	0.2	80	12.2	-12.0	-2.1	83	20.7	-20.5	-2.6			
27	150	4.4	-2.2	3.8	164	4.4	-1.2	4.2	147	4.3	-2.3	3.6	119	4.9	-4.3	2.4	102	6.1	-6.0	1.3	91	11.1	-11.1	0.2	84	20.7	-20.6	-2.2			
28	158	5.8	-2.2	5.4	158	5.2	-1.9	4.8	147	4.3	-2.3	3.6	119	3.8	-3.3	1.8	99	7.5	-7.4	1.2	82	11.8	-11.7	-1.6	78	19.3	-18.9	-3.9			
29	170	5.6	-1.0	5.5	172	4.5	-0.6	4.5	151	3.5	-1.7	3.1	119	3.9	-3.4	1.9	97	6.3	-6.2	0.8	83	9.1	-9.0	-1.1	77	20.9	-20.4	-4.6			
30	184	4.7	0.3	4.7	176	3.9	-0.3	3.9	150	3.2	-1.6	2.8	110	3.3	-3.1	1.1	91	6.9	-6.9	0.1	76	12.1	-11.7	-2.9	75	19.1	-18.4	-5.0			
31	171	6.2	-1.0	6.1	172	2.7	-0.4	2.7	142	1.8	-1.1	1.4	95	2.5	-2.5	0.2	89	6.9	-6.9	-0.1	80	11.4	-11.2	-1.9	83	19.3	-19.2	-2.3			

Daily Normals of Upper Air Winds (1971-2000)

201

KOLKATA

SEPTEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	167	6.6	-1.5	6.4	160	3.5	-1.2	3.3	139	2.8	-1.8	2.1	117	3.0	-2.7	1.4	94	6.3	-6.3	0.4	80	9.6	-9.5	-1.6	85	20.0	-19.9	-1.7
2	175	5.9	-0.5	5.9	176	4.3	-0.3	4.3	165	3.1	-0.8	3.0	118	3.2	-2.8	1.5	99	6.3	-6.2	1.0	86	8.9	-8.9	-0.6	81	20.1	-19.8	-3.2
3	174	5.6	-0.6	5.6	178	5.1	-0.2	5.1	190	2.3	0.4	2.3	109	2.4	-2.3	0.8	84	6.1	-6.1	-0.6	81	10.2	-10.1	-1.6	74	19.4	-18.7	-5.3
4	161	4.9	-1.6	4.6	186	2.7	0.3	2.7	184	1.5	0.1	1.5	114	2.2	-2.0	0.9	104	4.5	-4.4	1.1	78	7.6	-7.4	-1.6	82	17.0	-16.8	-2.4
5	173	4.7	-0.6	4.7	202	3.8	1.4	3.5	215	2.8	1.6	2.3	99	1.2	-1.2	0.2	91	4.3	-4.3	0.1	90	9.6	-9.6	0.0	82	17.8	-17.6	-2.4
6	156	4.3	-1.7	3.9	211	2.3	1.2	2.0	195	1.6	0.4	1.5	180	1.5	0.0	1.5	99	5.8	-5.7	0.9	91	8.6	-8.6	0.1	87	17.8	-17.8	-1.0
7	153	4.5	-2.0	4.0	159	1.7	-0.6	1.6	147	2.0	-1.1	1.7	117	3.1	-2.8	1.4	106	6.6	-6.4	1.8	87	8.6	-8.6	-0.5	87	17.2	-17.2	-1.0
8	172	5.7	-0.8	5.6	152	3.4	-1.6	3.0	135	3.4	-2.4	2.4	104	4.2	-4.1	1.0	98	6.2	-6.1	0.9	87	9.0	-9.0	-0.5	85	17.7	-17.6	-1.4
9	170	4.7	-0.8	4.6	152	4.5	-2.1	4.0	148	4.1	-2.2	3.5	114	4.4	-4.0	1.8	106	5.4	-5.2	1.5	82	8.4	-8.3	-1.1	84	16.3	-16.2	-1.6
10	184	3.2	0.2	3.2	158	4.8	-1.8	4.5	147	3.0	-1.6	2.5	134	2.8	-2.0	1.9	101	6.1	-6.0	1.2	86	8.7	-8.7	-0.6	85	16.7	-16.6	-1.4
11	208	3.4	1.6	3.0	171	4.9	-0.8	4.8	173	3.8	-0.5	3.8	146	3.0	-1.7	2.5	113	3.8	-3.5	1.5	80	7.5	-7.4	-1.3	79	16.9	-16.6	-3.3
12	234	2.6	2.1	1.5	196	4.7	1.3	4.5	199	3.4	1.1	3.2	165	2.7	-0.7	2.6	107	5.1	-4.9	1.5	74	8.1	-7.8	-2.3	78	13.9	-13.6	-2.8
13	185	2.3	0.2	2.3	193	4.0	0.9	3.9	213	2.7	1.5	2.3	122	1.5	-1.3	0.8	119	4.3	-3.8	2.1	80	6.1	-6.0	-1.1	87	14.0	-14.0	-0.8
14	188	3.7	0.5	3.7	206	3.4	1.5	3.1	210	3.4	1.7	3.0	191	1.5	0.3	1.5	171	2.4	-0.4	2.4	82	3.6	-3.6	-0.5	87	13.2	-13.2	-0.8
15	180	3.2	0.0	3.2	204	2.4	1.0	2.2	214	1.8	1.0	1.5	180	0.1	0.0	0.1	106	3.2	-3.1	0.9	82	4.9	-4.9	-0.7	88	12.2	-12.2	-0.4
16	144	3.1	-1.8	2.5	186	2.9	0.3	2.9	199	2.1	0.7	2.0	203	1.3	0.5	1.2	127	3.1	-2.5	1.9	91	4.8	-4.8	0.1	87	10.1	-10.1	-0.6
17	184	5.5	0.4	5.5	187	3.1	0.4	3.1	217	2.6	1.6	2.1	213	1.7	0.9	1.4	175	1.2	-0.1	1.2	73	3.4	-3.3	-1.0	79	10.7	-10.5	-2.0
18	199	5.5	1.8	5.2	210	2.4	1.2	2.1	216	2.7	1.6	2.2	292	0.5	0.5	-0.2	158	1.8	-0.7	1.7	78	2.4	-2.3	-0.5	88	9.4	-9.4	-0.3
19	202	3.7	1.4	3.4	195	2.0	0.5	1.9	191	1.5	0.3	1.5	159	1.4	-0.5	1.3	177	1.7	-0.1	1.7	111	2.5	-2.3	0.9	80	10.7	-10.5	-1.8
20	189	2.4	0.4	2.4	166	2.1	-0.5	2.0	155	2.1	-0.9	1.9	145	1.6	-0.9	1.3	155	1.9	-0.8	1.7	68	1.6	-1.5	-0.6	75	9.3	-9.0	-2.4
21	189	3.2	0.5	3.2	164	2.5	-0.7	2.4	165	2.0	-0.5	1.9	135	0.6	-0.4	0.4	115	1.9	-1.7	0.8	87	2.0	-2.0	-0.1	95	8.6	-8.6	0.7
22	201	2.8	1.0	2.6	182	2.7	0.1	2.7	180	2.5	0.0	2.5	117	1.1	-1.0	0.5	151	1.0	-0.5	0.9	104	2.1	-2.0	0.5	76	8.1	-7.9	-1.9
23	195	4.7	1.2	4.5	185	2.5	0.2	2.5	177	1.7	-0.1	1.7	189	0.6	0.1	0.6	113	0.8	-0.7	0.3	70	1.5	-1.4	-0.5	97	9.1	-9.0	1.1
24	193	3.6	0.8	3.5	160	2.3	-0.8	2.2	180	1.7	0.0	1.7	197	1.0	0.3	1.0	192	1.4	0.3	1.4	167	0.9	-0.2	0.9	91	7.7	-7.7	0.1
25	171	5.0	-0.8	4.9	179	3.9	-0.1	3.9	180	2.7	0.0	2.7	201	1.9	0.7	1.8	202	3.1	1.2	2.9	63	0.7	-0.6	-0.3	83	9.4	-9.3	-1.1
26	176	4.0	-0.3	4.0	193	3.7	0.8	3.6	217	3.0	1.8	2.4	220	3.0	1.9	2.3	207	1.6	0.7	1.4	185	1.1	0.1	1.1	89	8.8	-8.8	-0.1
27	241	4.8	4.2	2.3	221	2.3	1.5	1.7	257	3.5	3.4	0.8	242	1.9	1.7	0.9	219	1.4	0.9	1.1	172	1.5	-0.2	1.5	97	6.9	-6.9	0.8
28	246	2.0	1.8	0.8	180	0.5	0.0	0.5	255	2.0	1.9	0.5	255	3.1	3.0	0.8	212	1.9	1.0	1.6	176	2.8	-0.2	2.8	101	7.8	-7.7	1.5
29	317	2.2	1.5	-1.6	225	1.6	1.1	1.1	224	3.6	2.5	2.6	239	3.9	3.3	2.0	203	3.0	1.2	2.8	161	3.9	-1.3	3.7	109	7.3	-6.9	2.4
30	360	0.8	0.0	-0.8	211	1.2	0.6	1.0	239	2.3	2.0	1.2	244	2.8	2.5	1.2	233	4.0	3.2	2.4	199	2.1	0.7	2.0	93	5.5	-5.5	0.3

Daily Normals of Upper Air Winds (1971-2000)

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KOLKATA

OCTOBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	121	0.6	-0.5	0.3	180	1.5	0.0	1.5	235	1.2	1.0	0.7	237	3.3	2.8	1.8	235	4.0	3.3	2.3	237	3.0	2.5	1.6	110	6.8	-6.4	2.3			
2	204	1.0	0.4	0.9	176	1.4	-0.1	1.4	197	1.0	0.3	1.0	228	2.4	1.8	1.6	234	3.6	2.9	2.1	207	4.8	2.2	4.3	110	6.2	-5.8	2.1			
3	209	1.3	0.6	1.1	195	1.1	0.3	1.1	212	1.5	0.8	1.3	230	2.3	1.8	1.5	247	4.4	4.1	1.7	225	2.8	2.0	2.0	109	5.8	-5.5	1.9			
4	165	2.0	-0.5	1.9	184	1.5	0.1	1.5	209	1.8	0.9	1.6	229	4.1	3.1	2.7	229	5.3	4.0	3.5	224	3.3	2.3	2.4	106	6.6	-6.4	1.8			
5	161	1.8	-0.6	1.7	195	1.1	0.3	1.1	214	1.4	0.8	1.2	238	2.8	2.4	1.5	220	5.6	3.6	4.3	215	3.8	2.2	3.1	105	4.8	-4.6	1.2			
6	247	1.3	1.2	0.5	291	1.9	1.8	-0.7	264	1.9	1.9	0.2	270	2.8	2.8	0.0	233	4.0	3.2	2.4	214	4.2	2.4	3.5	92	2.5	-2.5	0.1			
7	203	1.5	0.6	1.4	203	0.8	0.3	0.7	252	1.3	1.2	0.4	250	3.2	3.0	1.1	251	5.0	4.7	1.6	239	5.4	4.6	2.8	101	3.3	-3.2	0.6			
8	209	1.8	0.9	1.6	204	1.2	0.5	1.1	253	3.4	3.3	1.0	252	5.4	5.1	1.7	247	6.6	6.1	2.6	241	4.8	4.2	2.3	127	3.4	-2.7	2.0			
9	175	2.5	-0.2	2.5	262	2.2	2.2	0.3	264	3.7	3.7	0.4	267	5.6	5.6	0.3	252	6.1	5.8	1.9	247	5.6	5.2	2.2	122	4.0	-3.4	2.1			
10	240	1.4	1.2	0.7	262	2.1	2.1	0.3	268	2.9	2.9	0.1	270	4.9	4.9	0.0	256	6.8	6.6	1.6	246	8.5	7.8	3.5	96	2.0	-2.0	0.2			
11	233	1.0	0.8	0.6	323	1.0	0.6	-0.8	267	1.7	1.7	0.1	283	4.8	4.7	-1.1	248	5.7	5.3	2.1	246	7.0	6.4	2.9	185	3.5	0.3	3.5			
12	217	0.5	0.3	0.4	329	0.6	0.3	-0.5	267	1.9	1.9	0.1	260	3.4	3.3	0.6	245	6.3	5.7	2.6	245	7.5	6.8	3.1	167	2.8	-0.6	2.7			
13	101	0.5	-0.5	0.1	13	1.3	-0.3	-1.3	278	1.5	1.5	-0.2	257	4.3	4.2	1.0	251	8.4	8.0	2.7	241	10.6	9.2	5.2	204	3.7	1.5	3.4			
14	198	0.3	0.1	0.3	117	0.2	-0.2	0.1	267	1.8	1.8	0.1	258	4.3	4.2	0.9	239	8.6	7.4	4.4	234	10.5	8.5	6.2	217	3.0	1.8	2.4			
15	346	0.4	0.1	-0.4	307	0.5	0.4	-0.3	259	1.6	1.6	0.3	243	4.2	3.7	1.9	244	9.3	8.3	4.1	240	10.1	8.7	5.1	254	1.9	1.8	0.5			
16	360	0.6	0.0	-0.6	180	0.2	0.0	0.2	245	1.4	1.3	0.6	253	5.3	5.1	1.6	256	10.4	10.1	2.5	244	10.1	9.1	4.4	218	2.3	1.4	1.8			
17	102	1.9	-1.9	0.4	60	0.8	-0.7	-0.4	246	2.0	1.8	0.8	256	4.9	4.7	1.2	249	9.1	8.5	3.2	244	11.3	10.2	4.9	161	1.8	-0.6	1.7			
18	171	1.2	-0.2	1.2	315	1.4	1.0	-1.0	261	2.0	2.0	0.3	256	5.5	5.3	1.3	247	10.1	9.3	3.9	245	10.2	9.2	4.3	252	2.5	2.4	0.8			
19	166	0.8	-0.2	0.8	312	1.3	1.0	-0.9	260	3.5	3.4	0.6	259	6.2	6.1	1.2	257	10.1	9.8	2.3	245	9.8	8.9	4.1	204	2.4	1.0	2.2			
20	90	0.5	-0.5	0.0	333	1.6	0.7	-1.4	263	3.4	3.4	0.4	258	6.1	6.0	1.3	254	12.3	11.8	3.4	250	11.7	11.0	4.1	225	3.3	2.3	2.3			
21	28	1.5	-0.7	-1.3	330	2.0	1.0	-1.7	276	3.6	3.6	-0.4	266	8.0	8.0	0.5	254	11.9	11.5	3.2	253	13.0	12.4	3.9	216	3.4	2.0	2.8			
22	18	0.3	-0.1	-0.3	338	1.8	0.7	-1.7	283	3.2	3.1	-0.7	268	7.3	7.3	0.3	255	13.9	13.4	3.6	259	15.1	14.8	3.0	234	3.9	3.2	2.3			
23	25	1.9	-0.8	-1.7	332	2.4	1.1	-2.1	285	4.3	4.2	-1.1	257	8.2	8.0	1.8	257	13.7	13.3	3.1	255	13.4	13.0	3.4	246	6.4	5.8	2.6			
24	13	2.3	-0.5	-2.2	317	2.2	1.5	-1.6	276	4.9	4.9	-0.5	264	8.3	8.3	0.8	261	15.3	15.1	2.4	253	16.5	15.8	4.7	248	7.4	6.9	2.8			
25	6	3.7	-0.4	-3.7	324	2.9	1.7	-2.3	283	4.9	4.8	-1.1	265	9.6	9.6	0.9	260	15.9	15.7	2.8	255	17.9	17.3	4.5	246	9.1	8.3	3.7			
26	4	3.1	-0.2	-3.1	329	3.5	1.8	-3.0	288	4.8	4.6	-1.5	268	9.6	9.6	0.4	262	17.9	17.7	2.4	261	21.3	21.1	3.2	262	10.1	10.0	1.4			
27	47	3.5	-2.6	-2.4	9	1.8	-0.3	-1.8	261	1.9	1.9	0.3	277	8.1	8.0	-1.0	260	15.7	15.5	2.7	259	20.3	19.9	3.8	262	7.6	7.5	1.0			
28	55	3.3	-2.7	-1.9	2	2.3	-0.1	-2.3	251	2.8	2.6	0.9	257	7.3	7.1	1.7	255	16.3	15.7	4.2	247	18.6	17.1	7.3	240	5.1	4.4	2.5			
29	31	2.3	-1.2	-2.0	58	1.5	-1.3	-0.8	250	3.5	3.3	1.2	259	7.9	7.8	1.5	251	17.9	17.0	5.7	245	19.0	17.3	7.9	250	6.3	5.9	2.1			
30	45	1.4	-1.0	-1.0	52	1.1	-0.9	-0.7	252	2.5	2.4	0.8	251	7.5	7.1	2.4	251	15.6	14.8	5.0	250	18.0	16.9	6.1	262	7.9	7.8	1.1			
31	60	2.0	-1.7	-1.0	16	1.5	-0.4	-1.4	249	3.6	3.4	1.3	259	7.6	7.5	1.4	260	17.7	17.4	3.2	262	21.2	21.0	2.8	282	8.0	7.8	-1.7			

Daily Normals of Upper Air Winds (1971-2000)

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KOLKATA

NOVEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	34	1.4	-0.8	-1.2	349	1.6	0.3	-1.6	253	4.4	4.2	1.3	271	8.0	8.0	-0.1	264	17.8	17.7	1.9	263	20.8	20.7	2.4	262	8.8	8.7	1.3			
2	26	2.5	-1.1	-2.3	349	1.5	0.3	-1.5	254	5.8	5.6	1.6	272	10.3	10.3	-0.3	263	20.4	20.2	2.6	257	22.0	21.5	4.8	266	9.5	9.5	0.6			
3	353	2.6	0.3	-2.6	333	1.1	0.5	-1.0	264	5.0	5.0	0.5	275	8.7	8.7	-0.7	261	19.4	19.2	3.1	253	23.0	22.0	6.7	274	8.2	8.2	-0.6			
4	14	3.0	-0.7	-2.9	306	1.9	1.5	-1.1	269	5.0	5.0	0.1	270	10.2	10.2	0.0	259	20.5	20.1	3.9	262	25.3	25.0	3.6	261	10.8	10.7	1.6			
5	7	2.4	-0.3	-2.4	319	1.8	1.2	-1.4	273	5.0	5.0	-0.3	268	10.4	10.4	0.4	264	20.4	20.3	2.3	258	25.1	24.5	5.3	254	9.1	8.7	2.5			
6	354	2.9	0.3	-2.9	341	2.8	0.9	-2.6	289	5.4	5.1	-1.8	273	10.6	10.6	-0.5	261	20.5	20.3	3.1	259	22.8	22.4	4.5	262	8.3	8.2	1.2			
7	353	3.9	0.5	-3.9	328	2.6	1.4	-2.2	292	4.8	4.5	-1.8	289	10.8	10.2	-3.6	273	19.9	19.9	-0.9	262	23.8	23.5	3.5	261	9.2	9.1	1.5			
8	347	3.2	0.7	-3.1	346	2.5	0.6	-2.4	297	4.8	4.3	-2.2	275	9.9	9.9	-0.9	264	17.8	17.7	2.0	259	23.6	23.2	4.3	263	11.8	11.7	1.5			
9	90	1.1	-1.1	0.0	336	1.2	0.5	-1.1	289	4.6	4.3	-1.5	278	10.7	10.6	-1.4	270	20.1	20.1	-0.1	260	23.6	23.2	4.2	271	10.4	10.4	-0.1			
10	304	1.4	1.2	-0.8	305	1.9	1.6	-1.1	288	5.5	5.2	-1.7	277	11.7	11.6	-1.4	266	22.7	22.6	1.6	257	25.1	24.5	5.6	256	10.2	9.9	2.5			
11	335	3.1	1.3	-2.8	339	2.8	1.0	-2.6	286	5.4	5.2	-1.5	272	10.3	10.3	-0.3	265	22.2	22.1	1.9	260	26.7	26.3	4.5	266	13.9	13.9	1.0			
12	341	3.7	1.2	-3.5	334	3.0	1.3	-2.7	288	5.1	4.8	-1.6	282	10.7	10.4	-2.3	267	23.6	23.6	1.3	267	25.4	25.4	1.2	279	9.3	9.2	-1.4			
13	11	3.1	-0.6	-3.0	345	3.0	0.8	-2.9	295	5.9	5.3	-2.5	277	11.2	11.1	-1.4	270	22.9	22.9	-0.1	263	26.3	26.1	3.1	279	8.4	8.3	-1.3			
14	10	2.7	-0.5	-2.7	343	3.4	1.0	-3.2	294	6.2	5.7	-2.5	281	11.8	11.6	-2.3	270	23.5	23.5	-0.1	267	26.6	26.6	1.2	267	13.5	13.5	0.8			
15	38	2.9	-1.8	-2.3	342	2.6	0.8	-2.5	300	5.6	4.9	-2.8	284	11.9	11.6	-2.8	268	25.8	25.8	0.7	263	29.4	29.2	3.7	279	9.7	9.6	-1.5			
16	16	2.9	-0.8	-2.8	333	2.5	1.1	-2.2	297	5.6	5.0	-2.5	279	11.7	11.6	-1.8	269	20.9	20.9	0.5	258	25.5	24.9	5.4	281	9.7	9.5	-1.9			
17	16	2.9	-0.8	-2.8	347	3.6	0.8	-3.5	289	5.7	5.4	-1.9	279	11.0	10.9	-1.7	267	23.7	23.7	1.1	255	27.5	26.5	7.3	264	10.7	10.6	1.2			
18	343	3.0	0.9	-2.9	336	3.2	1.3	-2.9	288	5.9	5.6	-1.8	268	12.2	12.2	0.4	261	25.0	24.7	4.0	248	27.4	25.4	10.4	260	13.9	13.7	2.3			
19	358	2.3	0.1	-2.3	324	2.9	1.7	-2.3	284	6.6	6.4	-1.6	273	14.2	14.2	-0.8	262	25.2	24.9	3.6	249	32.0	29.9	11.3	250	10.7	10.0	3.7			
20	356	3.0	0.2	-3.0	343	2.4	0.7	-2.3	297	5.6	5.0	-2.6	274	12.7	12.7	-0.8	259	26.7	26.2	5.0	248	29.7	27.6	11.0	262	15.3	15.1	2.2			
21	13	3.5	-0.8	-3.4	342	3.2	1.0	-3.0	304	4.6	3.8	-2.6	273	12.0	12.0	-0.7	256	25.6	24.8	6.4	250	28.6	26.9	9.7	270	12.3	12.3	-0.1			
22	1	4.1	-0.1	-4.1	356	3.0	0.2	-3.0	295	5.4	4.9	-2.3	261	12.7	12.5	2.0	257	25.3	24.6	5.7	247	31.7	29.1	12.5	260	13.4	13.2	2.4			
23	355	3.6	0.3	-3.6	337	3.0	1.2	-2.8	291	6.0	5.6	-2.1	266	13.0	13.0	0.9	255	26.2	25.4	6.6	248	29.6	27.4	11.1	247	11.7	10.8	4.5			
24	349	3.2	0.6	-3.1	338	3.1	1.2	-2.9	282	6.9	6.8	-1.4	270	15.8	15.8	0.1	259	25.9	25.5	4.8	253	32.5	31.1	9.5	255	15.4	14.9	4.0			
25	344	5.2	1.4	-5.0	332	4.7	2.2	-4.1	291	7.3	6.8	-2.6	277	14.7	14.6	-1.9	265	25.4	25.3	2.2	260	29.8	29.3	5.4	264	12.4	12.3	1.4			
26	342	4.1	1.3	-3.9	319	3.3	2.2	-2.5	281	7.1	7.0	-1.4	280	14.1	13.9	-2.4	267	25.4	25.4	1.5	251	27.4	26.0	8.8	253	10.9	10.4	3.1			
27	346	4.2	1.0	-4.1	345	3.1	0.8	-3.0	291	8.1	7.6	-2.9	279	14.1	13.9	-2.1	265	24.8	24.7	2.0	254	27.6	26.6	7.4	259	16.9	16.6	3.3			
28	338	3.5	1.3	-3.2	338	4.0	1.5	-3.7	280	8.1	8.0	-1.4	275	15.1	15.0	-1.4	262	26.2	25.9	3.8	250	30.3	28.5	10.4	264	14.5	14.4	1.4			
29	344	4.6	1.3	-4.4	352	4.3	0.6	-4.3	285	7.4	7.2	-1.9	275	15.6	15.5	-1.3	260	26.1	25.7	4.4	255	32.1	31.0	8.3	273	13.4	13.4	-0.8			
30	341	3.4	1.1	-3.2	328	4.1	2.2	-3.5	287	7.7	7.4	-2.2	282	15.5	15.2	-3.1	266	28.1	28.0	2.0	254	34.5	33.2	9.5	259	14.4	14.1	2.7			

Daily Normals of Upper Air Winds (1971-2000)

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KOLKATA

DECEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	334	3.9	1.7	-3.5	325	3.8	2.2	-3.1	289	8.5	8.0	-2.8	281	15.7	15.4	-2.9	273	26.5	26.5	-1.2	258	33.1	32.4	7.0	259	15.3	15.0	2.9			
2	332	3.6	1.7	-3.2	325	4.4	2.5	-3.6	292	7.9	7.3	-2.9	276	14.7	14.6	-1.6	268	27.0	27.0	1.1	254	32.5	31.3	8.7	258	15.5	15.2	3.2			
3	343	4.9	1.4	-4.7	331	4.3	2.1	-3.8	293	7.8	7.2	-3.1	273	13.5	13.5	-0.8	266	24.4	24.4	1.5	255	33.2	32.1	8.5	259	16.8	16.5	3.2			
4	344	4.6	1.3	-4.4	326	5.0	2.8	-4.1	290	8.5	8.0	-2.9	276	14.9	14.8	-1.6	266	25.3	25.2	1.8	260	33.5	33.0	5.8	261	16.6	16.4	2.7			
5	345	4.3	1.1	-4.2	332	5.2	2.4	-4.6	298	7.6	6.7	-3.5	283	15.2	14.8	-3.3	260	26.3	25.9	4.8	252	33.2	31.6	10.2	261	16.4	16.2	2.6			
6	352	4.4	0.6	-4.4	325	4.5	2.6	-3.7	294	7.7	7.1	-3.1	281	13.4	13.1	-2.6	270	26.1	26.1	-0.1	255	33.1	31.9	8.8	263	17.2	17.1	2.1			
7	348	4.2	0.9	-4.1	328	3.9	2.1	-3.3	292	7.5	7.0	-2.8	277	15.0	14.9	-1.8	267	26.8	26.8	1.6	254	32.5	31.2	9.0	258	16.1	15.8	3.3			
8	337	2.8	1.1	-2.6	322	4.1	2.5	-3.2	297	9.1	8.1	-4.2	279	14.7	14.5	-2.3	269	25.4	25.4	0.6	253	33.2	31.8	9.6	254	15.1	14.5	4.2			
9	330	2.4	1.2	-2.1	319	4.8	3.1	-3.6	293	8.8	8.1	-3.5	269	15.5	15.5	0.4	263	28.4	28.2	3.3	257	32.2	31.4	7.0	265	15.0	15.0	1.2			
10	338	3.2	1.2	-3.0	324	4.1	2.4	-3.3	289	9.4	8.9	-3.0	274	18.2	18.1	-1.4	267	30.2	30.2	1.7	257	32.3	31.4	7.4	260	16.7	16.5	2.8			
11	326	3.7	2.1	-3.1	319	4.8	3.1	-3.6	288	10.1	9.6	-3.2	277	17.8	17.7	-2.2	266	31.2	31.1	2.0	258	36.0	35.2	7.4	261	19.8	19.5	3.2			
12	344	4.1	1.1	-3.9	322	5.0	3.1	-3.9	292	9.9	9.2	-3.7	280	17.7	17.4	-3.0	265	29.7	29.6	2.5	252	33.7	32.1	10.2	259	14.8	14.5	2.8			
13	339	4.4	1.6	-4.1	313	5.7	4.2	-3.9	287	9.4	9.0	-2.7	277	18.8	18.6	-2.4	264	27.7	27.5	3.0	260	33.6	33.1	5.8	255	21.9	21.2	5.6			
14	321	4.0	2.5	-3.1	319	5.6	3.7	-4.2	289	10.7	10.1	-3.5	276	16.8	16.7	-1.9	262	29.0	28.7	4.0	254	39.2	37.6	11.0	269	20.9	20.9	0.4			
15	333	3.7	1.7	-3.3	324	4.9	2.9	-4.0	289	10.6	10.0	-3.4	276	18.1	18.0	-1.9	267	31.5	31.4	1.8	258	33.0	32.3	6.9	269	15.3	15.3	0.3			
16	347	3.9	0.9	-3.8	327	4.4	2.4	-3.7	299	9.8	8.6	-4.8	282	17.5	17.1	-3.6	272	30.2	30.2	-0.8	265	35.9	35.7	3.3	262	20.6	20.4	2.9			
17	350	3.9	0.7	-3.8	320	3.8	2.4	-2.9	291	9.1	8.5	-3.2	279	17.3	17.1	-2.7	273	30.8	30.8	-1.5	259	37.2	36.5	7.4	254	18.4	17.6	5.2			
18	338	4.0	1.5	-3.7	317	5.0	3.4	-3.7	295	11.0	9.9	-4.7	276	18.0	17.9	-2.0	270	32.4	32.4	0.1	260	39.1	38.6	6.5	274	20.6	20.6	-1.4			
19	335	4.2	1.8	-3.8	319	4.9	3.2	-3.7	295	10.1	9.1	-4.3	280	18.8	18.5	-3.4	274	33.4	33.3	-2.1	263	37.7	37.5	4.3	271	19.5	19.5	-0.2			
20	337	3.9	1.5	-3.6	321	5.3	3.3	-4.1	293	8.6	7.9	-3.4	275	18.2	18.1	-1.7	270	32.4	32.4	0.1	258	34.0	33.2	7.3	274	12.3	12.3	-0.8			
21	321	3.2	2.0	-2.5	313	5.0	3.6	-3.4	296	10.2	9.1	-4.5	281	18.7	18.4	-3.5	268	33.1	33.1	1.0	257	40.4	39.4	8.9	269	22.0	22.0	0.2			
22	339	3.9	1.4	-3.6	324	5.2	3.0	-4.2	297	9.0	8.0	-4.1	280	19.3	19.0	-3.5	268	32.7	32.7	1.2	261	37.1	36.6	6.1	264	20.1	20.0	2.0			
23	343	3.4	1.0	-3.3	319	5.5	3.6	-4.2	292	9.7	9.0	-3.7	276	20.7	20.6	-2.2	265	34.9	34.8	3.0	255	36.0	34.7	9.4	260	22.6	22.2	4.1			
24	355	2.4	0.2	-2.4	326	4.2	2.4	-3.5	286	9.4	9.0	-2.6	277	18.3	18.2	-2.1	265	34.3	34.2	3.1	254	39.4	37.8	11.0	261	19.3	19.0	3.1			
25	337	2.5	1.0	-2.3	327	4.2	2.3	-3.5	285	8.7	8.4	-2.3	276	19.2	19.1	-1.9	271	33.7	33.7	-0.3	270	38.4	38.4	-0.1	272	28.8	28.8	-0.9			
26	350	4.0	0.7	-3.9	312	4.5	3.3	-3.0	282	10.2	10.0	-2.2	274	18.1	18.1	-1.3	270	36.6	36.6	0.1	258	40.8	39.9	8.3	265	25.0	24.9	2.1			
27	340	4.4	1.5	-4.1	321	5.8	3.7	-4.5	286	9.8	9.4	-2.7	275	18.8	18.7	-1.7	269	35.4	35.4	0.7	259	43.0	42.2	8.4	262	27.7	27.5	3.7			
28	354	3.0	0.3	-3.0	302	4.9	4.2	-2.6	286	10.4	10.0	-2.9	276	19.5	19.4	-2.0	260	36.3	35.7	6.4	259	38.0	37.3	7.3	270	25.6	25.6	0.2			
29	331	3.5	1.7	-3.1	310	5.7	4.4	-3.7	287	10.8	10.3	-3.2	275	20.9	20.8	-1.8	265	35.2	35.1	3.2	263	41.4	41.1	4.7	270	21.8	21.8	0.0			
30	333	2.9	1.3	-2.6	308	5.2	4.1	-3.2	289	12.0	11.3	-3.9	273	21.2	21.2	-1.2	267	34.4	34.4	1.8	262	37.1	36.8	4.9	265	22.4	22.3	2.1			
31	344	2.9	0.8	-2.8	314	5.6	4.0	-3.9	291	12.8	11.9	-4.6	277	22.6	22.4	-2.7	269	34.7	34.7	0.4	259	35.8	35.1	7.0	265	23.6	23.5	2.2			

Daily Normals of Upper Air Winds (1971-2000)

LUCKNOW

JANUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	317	3.4	2.3	-2.5	307	6.0	4.8	-3.6	292	8.8	8.2	-3.3	283	21.5	21.0	-4.7	274	40.0	39.9	-2.9	272	47.6	47.6	-1.9	271	33.9	33.9	-0.8
2	325	1.9	1.1	-1.6	306	5.2	4.2	-3.1	297	10.3	9.2	-4.6	285	21.4	20.6	-5.7	279	39.8	39.3	-6.3	276	47.2	46.9	-5.0	255	32.0	31.0	8.1
3	344	1.5	0.4	-1.4	305	4.5	3.7	-2.6	296	8.3	7.5	-3.6	288	18.8	17.9	-5.8	284	41.2	40.0	-9.8	279	44.7	44.1	-7.2	265	29.7	29.6	2.7
4	289	3.1	2.9	-1.0	304	5.2	4.3	-2.9	295	10.7	9.7	-4.6	275	19.1	19.0	-1.7	271	38.5	38.5	-0.6	268	47.5	47.5	1.5	274	32.2	32.1	-2.4
5	305	3.8	3.1	-2.2	311	4.9	3.7	-3.2	280	9.2	9.1	-1.6	266	25.9	25.8	1.9	265	38.0	37.8	3.6	263	48.0	47.6	5.9	267	27.4	27.4	1.4
6	329	1.7	0.9	-1.5	303	4.3	3.6	-2.3	285	8.4	8.1	-2.1	283	18.7	18.2	-4.1	272	36.8	36.8	-1.5	272	37.0	37.0	-1.3	278	26.0	25.7	-3.8
7	41	0.9	-0.6	-0.7	286	3.3	3.2	-0.9	284	8.9	8.6	-2.1	280	18.9	18.6	-3.3	273	35.4	35.3	-2.0	267	44.3	44.2	2.6	267	26.0	26.0	1.3
8	324	0.9	0.5	-0.7	295	2.6	2.4	-1.1	277	7.4	7.3	-0.9	269	17.8	17.8	0.3	267	38.4	38.3	2.1	261	43.0	42.4	7.0	265	33.2	33.1	3.1
9	284	1.2	1.2	-0.3	295	4.7	4.2	-2.0	283	8.6	8.4	-2.0	277	19.3	19.2	-2.3	272	38.8	38.8	-1.1	266	50.3	50.2	3.8	267	28.9	28.9	1.7
10	306	2.6	2.1	-1.5	300	4.4	3.8	-2.2	284	9.5	9.2	-2.3	276	20.8	20.7	-2.3	267	41.7	41.6	2.5	264	49.0	48.7	5.4	268	29.7	29.7	0.8
11	304	3.4	2.8	-1.9	293	3.6	3.3	-1.4	275	8.5	8.5	-0.8	271	21.2	21.2	-0.5	265	41.6	41.5	3.3	262	49.1	48.6	7.1	271	27.1	27.1	-0.7
12	288	4.0	3.8	-1.2	299	5.3	4.6	-2.6	275	10.1	10.1	-0.9	277	22.6	22.4	-2.8	271	41.9	41.9	-0.8	265	49.9	49.7	4.0	273	34.5	34.4	-1.9
13	304	5.0	4.1	-2.8	296	5.3	4.8	-2.3	285	10.7	10.3	-2.8	278	23.4	23.2	-3.1	273	42.2	42.1	-2.5	267	46.4	46.3	2.8	272	37.1	37.1	-1.5
14	311	1.8	1.4	-1.2	296	5.0	4.5	-2.2	281	11.2	11.0	-2.2	273	25.0	25.0	-1.3	271	46.6	46.6	-1.0	266	52.2	52.0	4.0	261	35.7	35.2	5.8
15	315	2.1	1.5	-1.5	298	4.4	3.9	-2.1	284	11.3	11.0	-2.7	276	24.5	24.4	-2.5	269	43.6	43.6	0.5	268	49.7	49.7	1.4	274	30.1	30.0	-2.0
16	305	3.8	3.1	-2.2	300	6.2	5.4	-3.1	286	10.2	9.8	-2.8	281	23.3	22.8	-4.6	277	45.5	45.2	-5.2	269	51.0	51.0	0.9	274	30.5	30.4	-2.1
17	297	4.9	4.4	-2.2	299	6.5	5.7	-3.1	294	11.2	10.3	-4.5	286	22.1	21.3	-6.0	279	37.6	37.1	-5.8	271	46.2	46.2	-0.8	271	31.0	31.0	-0.3
18	300	4.4	3.8	-2.2	295	5.4	4.9	-2.3	290	10.7	10.1	-3.6	280	20.0	19.7	-3.4	275	43.3	43.1	-3.8	275	49.2	49.0	-4.2	278	28.3	28.0	-4.0
19	294	2.7	2.5	-1.1	294	4.5	4.1	-1.8	285	10.9	10.5	-2.8	277	22.8	22.6	-2.9	274	42.4	42.3	-2.7	274	49.9	49.8	-3.3	277	35.2	35.0	-4.0
20	294	3.7	3.4	-1.5	294	4.8	4.4	-2.0	282	9.3	9.1	-2.0	275	20.3	20.2	-1.8	270	39.7	39.7	-0.3	267	48.6	48.5	2.4	264	28.7	28.5	3.1
21	306	3.2	2.6	-1.9	276	2.9	2.9	-0.3	279	10.8	10.7	-1.7	274	19.1	19.1	-1.2	271	34.3	34.3	-0.5	268	44.1	44.1	1.9	273	34.9	34.9	-1.6
22	285	5.8	5.6	-1.5	296	5.1	4.6	-2.2	285	10.6	10.2	-2.8	280	22.4	22.1	-3.8	271	42.9	42.9	-1.0	267	47.1	47.0	2.5	272	34.5	34.5	-1.0
23	290	5.3	5.0	-1.8	296	5.8	5.2	-2.5	291	11.8	11.0	-4.2	277	23.3	23.1	-2.9	274	43.8	43.7	-3.3	271	50.0	50.0	-0.7	268	38.0	38.0	1.0
24	296	6.7	6.0	-2.9	297	7.3	6.5	-3.3	290	13.2	12.4	-4.6	274	23.3	23.2	-1.8	271	40.1	40.1	-0.8	269	46.6	46.6	0.5	272	30.5	30.5	-1.0
25	303	6.6	5.5	-3.6	292	5.8	5.4	-2.2	285	10.6	10.2	-2.7	278	21.1	20.9	-3.1	275	37.8	37.7	-3.1	271	45.2	45.2	-0.8	272	31.9	31.9	-1.1
26	295	5.5	5.0	-2.3	292	4.1	3.8	-1.5	283	10.9	10.6	-2.5	275	22.5	22.4	-2.0	270	41.8	41.8	0.1	266	51.2	51.0	4.0	268	36.3	36.3	1.5
27	312	3.0	2.2	-2.0	293	6.0	5.5	-2.3	276	10.0	9.9	-1.1	273	22.2	22.2	-1.3	270	44.0	44.0	-0.2	267	51.9	51.8	2.9	267	24.2	24.2	1.4
28	310	3.9	3.0	-2.5	303	5.9	5.0	-3.2	284	12.3	11.9	-3.0	275	25.3	25.2	-2.0	278	38.5	38.2	-5.1	272	47.3	47.3	-2.0	267	43.9	43.8	2.2
29	296	2.5	2.3	-1.1	284	5.5	5.3	-1.3	288	11.2	10.7	-3.4	285	23.1	22.3	-5.9	278	45.2	44.8	-6.0	272	51.2	51.2	-2.0	288	26.4	25.2	-8.0
30	296	3.7	3.3	-1.6	297	6.0	5.4	-2.7	279	10.8	10.7	-1.7	278	24.4	24.2	-3.3	273	40.5	40.4	-2.4	270	44.7	44.7	0.2	268	31.1	31.1	1.3
31	313	3.4	2.5	-2.3	293	4.8	4.4	-1.9	283	9.5	9.3	-2.1	279	21.7	21.4	-3.3	273	41.1	41.0	-2.4	277	50.6	50.2	-6.5	281	36.0	35.4	-6.8

Daily Normals of Upper Air Winds (1971-2000)

206

LUCKNOW

FEBRUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	295	2.3	2.1	-1.0	297	5.9	5.2	-2.7	289	9.7	9.2	-3.2	281	22.1	21.7	-4.2	274	40.9	40.8	-3.1	272	51.3	51.3	-2.0	265	33.4	33.3	2.8			
2	307	1.0	0.8	-0.6	295	4.7	4.2	-2.0	284	10.5	10.2	-2.6	276	22.7	22.6	-2.4	275	43.0	42.9	-3.4	271	50.5	50.5	-1.2	275	38.3	38.2	-3.3			
3	309	2.6	2.0	-1.6	303	5.3	4.4	-2.9	285	12.3	11.9	-3.1	275	23.2	23.1	-2.0	275	41.3	41.1	-3.9	271	50.5	50.5	-0.6	270	34.7	34.7	0.2			
4	276	3.1	3.1	-0.3	289	5.0	4.7	-1.6	283	10.0	9.8	-2.2	281	21.5	21.1	-4.2	273	38.0	37.9	-2.2	268	47.8	47.8	1.5	275	35.8	35.7	-3.2			
5	281	2.6	2.6	-0.5	287	5.9	5.6	-1.7	287	9.9	9.5	-2.9	277	21.7	21.5	-2.8	272	38.8	38.8	-1.5	269	49.5	49.5	1.2	263	32.6	32.3	4.2			
6	293	3.3	3.0	-1.3	296	5.3	4.8	-2.3	294	10.9	9.9	-4.5	284	20.0	19.4	-5.0	281	38.4	37.7	-7.2	276	47.3	47.1	-4.8	273	31.6	31.5	-1.9			
7	284	2.1	2.0	-0.5	299	4.9	4.3	-2.4	293	10.8	9.9	-4.3	283	19.1	18.6	-4.3	279	38.9	38.5	-5.8	272	43.2	43.2	-1.5	268	32.5	32.5	0.9			
8	273	2.2	2.2	-0.1	296	5.1	4.6	-2.2	290	10.7	10.0	-3.7	283	20.7	20.2	-4.5	276	34.8	34.6	-3.5	268	39.8	39.8	1.1	272	28.2	28.2	-1.1			
9	309	1.3	1.0	-0.8	299	5.3	4.6	-2.6	297	10.6	9.5	-4.8	288	20.3	19.3	-6.4	280	33.1	32.6	-5.5	275	38.6	38.5	-3.1	280	25.3	24.9	-4.4			
10	305	1.2	1.0	-0.7	298	4.0	3.5	-1.9	291	9.3	8.7	-3.4	286	22.0	21.1	-6.2	286	31.3	30.1	-8.7	282	41.7	40.7	-8.9	277	32.3	32.1	-3.9			
11	301	2.6	2.2	-1.3	291	4.4	4.1	-1.6	297	8.5	7.6	-3.9	280	19.9	19.6	-3.3	282	33.9	33.2	-7.0	277	42.5	42.2	-4.9	276	24.3	24.2	-2.4			
12	292	3.5	3.3	-1.3	300	5.6	4.9	-2.8	289	11.0	10.4	-3.5	278	19.7	19.5	-2.8	273	36.9	36.9	-1.7	270	44.7	44.7	0.1	275	31.1	31.0	-2.8			
13	294	4.8	4.4	-2.0	297	5.1	4.5	-2.3	282	10.2	10.0	-2.1	277	21.6	21.5	-2.5	268	38.1	38.1	1.6	267	46.9	46.8	2.4	266	28.3	28.2	1.9			
14	286	4.7	4.5	-1.3	291	5.5	5.1	-2.0	288	10.8	10.3	-3.3	274	20.6	20.5	-1.6	270	36.2	36.2	0.1	268	42.8	42.8	1.2	273	29.6	29.6	-1.4			
15	297	4.2	3.7	-1.9	290	4.4	4.1	-1.5	287	10.8	10.3	-3.1	281	20.9	20.5	-4.1	275	37.3	37.1	-3.5	270	41.0	41.0	0.0	274	27.1	27.0	-2.0			
16	292	5.3	4.9	-2.0	286	5.3	5.1	-1.5	281	11.9	11.7	-2.2	276	23.3	23.2	-2.3	270	38.5	38.5	-0.2	267	45.6	45.5	2.2	274	23.4	23.4	-1.5			
17	295	4.7	4.2	-2.0	288	4.4	4.2	-1.4	274	10.4	10.4	-0.8	273	21.7	21.7	-1.2	273	44.2	44.1	-2.2	270	46.5	46.5	-0.2	267	27.4	27.4	1.5			
18	286	5.6	5.4	-1.5	291	6.8	6.4	-2.4	278	10.1	10.0	-1.4	277	22.6	22.4	-2.8	270	43.6	43.6	-0.3	263	45.2	44.8	5.8	268	28.6	28.6	1.1			
19	295	6.7	6.1	-2.8	288	7.3	6.9	-2.3	280	11.8	11.6	-2.0	275	21.6	21.5	-2.0	274	42.1	42.0	-2.6	265	43.2	43.1	3.4	267	27.0	27.0	1.3			
20	280	3.6	3.5	-0.6	284	5.7	5.5	-1.4	278	11.5	11.4	-1.7	279	21.0	20.7	-3.3	273	38.9	38.8	-2.2	267	43.7	43.6	2.2	268	25.7	25.7	0.9			
21	286	4.8	4.6	-1.3	294	5.8	5.3	-2.4	282	10.4	10.2	-2.2	277	20.4	20.2	-2.5	271	37.9	37.9	-0.4	269	43.5	43.5	0.6	277	27.3	27.1	-3.3			
22	300	6.2	5.4	-3.1	298	6.9	6.1	-3.2	289	10.8	10.2	-3.6	284	21.0	20.4	-5.1	276	36.7	36.5	-4.0	269	39.8	39.8	0.4	281	24.3	23.8	-4.7			
23	295	4.7	4.2	-2.0	302	6.5	5.5	-3.4	294	10.5	9.6	-4.3	280	19.0	18.7	-3.4	278	37.4	37.1	-5.0	274	43.4	43.3	-3.4	277	28.2	28.0	-3.2			
24	295	2.1	1.9	-0.9	299	6.0	5.3	-2.9	285	10.6	10.3	-2.7	282	22.3	21.8	-4.8	283	34.2	33.3	-7.9	276	43.5	43.3	-4.5	277	28.7	28.5	-3.7			
25	310	2.3	1.8	-1.5	281	5.9	5.8	-1.1	283	12.3	12.0	-2.7	277	20.6	20.4	-2.5	271	34.3	34.3	-0.8	271	39.6	39.6	-0.5	266	26.2	26.1	1.7			
26	283	4.3	4.2	-1.0	297	7.4	6.6	-3.3	284	10.5	10.2	-2.5	276	20.5	20.4	-2.2	277	36.4	36.1	-4.6	276	44.2	44.0	-4.6	262	26.0	25.7	3.8			
27	302	4.6	3.9	-2.4	293	5.7	5.3	-2.2	285	11.4	11.0	-3.0	280	20.4	20.1	-3.4	272	35.9	35.9	-1.2	270	43.7	43.7	-0.1	269	27.6	27.6	0.7			
28	310	4.3	3.3	-2.8	296	6.6	5.9	-2.9	278	12.9	12.8	-1.7	280	22.8	22.5	-3.8	278	34.0	33.7	-4.7	277	40.6	40.3	-5.3	274	32.1	32.0	-2.2			
29	290	3.7	3.5	-1.3	302	8.4	7.1	-4.4	285	13.9	13.4	-3.7	271	20.3	20.3	-0.5	277	26.9	26.7	-3.1	268	41.3	41.3	1.7	264	29.5	29.3	3.3			

Daily Normals of Upper Air Winds (1971-2000)

207

LUCKNOW

MARCH

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	309	4.1	3.2	-2.6	302	6.2	5.2	-3.3	289	10.0	9.4	-3.3	278	18.2	18.0	-2.6	273	33.9	33.8	-2.0	268	39.7	39.7	1.7	268	29.6	29.6	0.8			
2	287	5.9	5.6	-1.7	292	7.9	7.3	-2.9	289	10.5	9.9	-3.4	286	18.0	17.3	-4.8	279	35.1	34.7	-5.6	275	36.6	36.4	-3.5	273	25.9	25.9	-1.2			
3	297	4.0	3.6	-1.8	297	7.3	6.5	-3.3	287	11.5	11.0	-3.4	283	19.2	18.7	-4.2	279	28.8	28.4	-4.5	275	34.0	33.9	-2.9	271	22.4	22.4	-0.2			
4	298	4.3	3.8	-2.0	296	5.5	5.0	-2.4	289	9.6	9.1	-3.1	278	18.5	18.3	-2.7	275	30.7	30.6	-2.6	273	35.4	35.4	-1.6	277	28.9	28.7	-3.6			
5	288	5.2	5.0	-1.6	280	5.5	5.4	-1.0	283	11.1	10.8	-2.5	275	19.8	19.7	-1.8	269	33.4	33.4	0.3	266	35.3	35.2	2.3	266	24.4	24.3	1.8			
6	284	5.3	5.1	-1.3	286	6.5	6.2	-1.8	287	11.7	11.2	-3.4	279	18.0	17.8	-2.8	272	34.2	34.2	-1.4	270	39.6	39.6	-0.1	274	27.5	27.4	-1.7			
7	298	6.4	5.6	-3.0	296	6.4	5.7	-2.8	288	10.6	10.1	-3.3	280	17.8	17.5	-3.0	278	30.7	30.4	-4.1	268	37.2	37.2	1.6	267	26.6	26.6	1.2			
8	302	6.7	5.7	-3.5	297	7.6	6.8	-3.4	289	12.2	11.6	-3.9	280	19.3	19.0	-3.5	274	31.1	31.0	-2.3	271	38.7	38.7	-0.5	265	17.2	17.1	1.6			
9	288	6.3	6.0	-2.0	297	6.8	6.1	-3.1	290	10.3	9.7	-3.6	280	19.2	18.9	-3.3	268	33.3	33.3	1.0	270	37.0	37.0	0.1	270	24.1	24.1	0.2			
10	285	5.0	4.8	-1.3	291	6.1	5.7	-2.2	283	10.8	10.5	-2.5	273	21.1	21.1	-1.1	266	33.6	33.5	2.3	261	41.1	40.6	6.4	263	23.4	23.2	2.7			
11	298	5.8	5.1	-2.7	295	6.2	5.6	-2.6	279	10.5	10.4	-1.6	273	18.2	18.2	-1.1	266	30.3	30.2	2.3	263	36.5	36.2	4.6	277	29.7	29.5	-3.4			
12	286	4.4	4.2	-1.2	289	6.4	6.0	-2.1	283	11.3	11.0	-2.5	277	20.0	19.8	-2.5	270	34.5	34.5	0.2	266	39.8	39.7	2.8	273	27.8	27.8	-1.3			
13	309	6.0	4.7	-3.8	299	7.2	6.3	-3.5	286	11.4	11.0	-3.1	285	18.7	18.0	-4.9	274	32.2	32.1	-2.5	271	41.6	41.6	-1.0	265	32.0	31.9	3.0			
14	290	6.5	6.1	-2.2	288	7.1	6.8	-2.2	288	11.1	10.6	-3.4	280	18.1	17.8	-3.2	278	31.2	30.9	-4.1	273	35.5	35.4	-2.0	271	27.1	27.1	-0.5			
15	299	6.0	5.2	-2.9	300	7.2	6.2	-3.6	286	11.0	10.6	-3.1	284	18.0	17.5	-4.4	280	31.9	31.5	-5.3	276	37.1	36.9	-4.2	277	26.5	26.3	-3.1			
16	295	7.8	7.1	-3.3	292	7.5	7.0	-2.8	287	12.5	11.9	-3.7	281	19.0	18.7	-3.5	275	33.5	33.4	-3.0	266	42.1	42.0	2.6	268	25.4	25.4	0.8			
17	291	8.7	8.1	-3.1	292	7.9	7.3	-3.0	287	12.0	11.5	-3.5	280	18.6	18.3	-3.2	272	30.4	30.4	-0.9	267	42.1	42.0	2.4	271	21.6	21.6	-0.5			
18	295	6.5	5.9	-2.7	290	7.2	6.8	-2.5	281	12.0	11.8	-2.3	279	18.6	18.4	-2.9	273	30.9	30.9	-1.5	272	40.4	40.4	-1.1	277	23.4	23.2	-2.9			
19	291	5.0	4.7	-1.8	294	7.7	7.0	-3.1	287	11.3	10.8	-3.2	286	19.1	18.4	-5.2	276	28.3	28.1	-3.1	271	36.6	36.6	-0.6	267	23.7	23.7	1.2			
20	293	7.0	6.5	-2.7	291	7.4	6.9	-2.6	289	12.0	11.4	-3.9	282	19.9	19.5	-4.1	281	29.5	29.0	-5.4	278	35.3	35.0	-4.8	274	23.2	23.1	-1.6			
21	270	4.9	4.9	0.0	288	6.5	6.2	-2.0	290	11.0	10.4	-3.7	277	18.2	18.1	-2.2	276	29.9	29.7	-3.0	271	37.6	37.6	-0.6	270	28.2	28.2	0.0			
22	321	4.5	2.8	-3.5	292	6.1	5.6	-2.3	282	11.2	11.0	-2.3	277	17.8	17.7	-2.3	279	31.6	31.2	-5.1	272	36.5	36.5	-1.2	278	24.9	24.6	-3.6			
23	284	4.2	4.1	-1.0	291	6.0	5.6	-2.1	282	12.3	12.0	-2.5	277	17.8	17.7	-2.1	277	29.8	29.6	-3.7	268	33.6	33.6	1.2	272	24.3	24.3	-1.0			
24	287	3.9	3.7	-1.1	289	5.0	4.7	-1.6	279	9.1	9.0	-1.5	275	16.1	16.0	-1.5	277	25.5	25.3	-3.2	265	27.4	27.3	2.2	279	20.2	19.9	-3.2			
25	297	4.4	3.9	-2.0	283	4.3	4.2	-1.0	288	8.9	8.5	-2.7	282	14.2	13.9	-3.0	281	25.3	24.8	-4.9	270	29.6	29.6	-0.2	271	19.6	19.6	-0.4			
26	287	4.1	3.9	-1.2	297	5.9	5.3	-2.7	289	9.6	9.1	-3.1	285	14.3	13.8	-3.8	280	23.7	23.3	-4.3	276	31.5	31.3	-3.2	291	15.9	14.8	-5.7			
27	292	6.9	6.4	-2.6	298	5.8	5.1	-2.7	297	9.4	8.4	-4.2	291	17.3	16.1	-6.2	285	22.8	22.1	-5.8	281	29.3	28.7	-5.8	283	18.2	17.7	-4.2			
28	302	3.9	3.3	-2.1	296	5.2	4.7	-2.3	292	10.4	9.6	-3.9	284	17.2	16.7	-4.2	281	28.4	27.8	-5.6	276	35.6	35.4	-3.8	295	25.8	23.4	-10.8			
29	315	4.4	3.1	-3.1	300	6.4	5.5	-3.2	291	10.2	9.5	-3.7	280	17.5	17.2	-3.1	272	28.2	28.2	-1.2	270	35.1	35.1	0.2	264	26.4	26.3	2.7			
30	317	4.9	3.3	-3.6	298	6.9	6.1	-3.2	293	10.2	9.4	-4.0	294	18.4	16.9	-7.4	292	27.1	25.2	-10.0	281	30.8	30.2	-5.9	295	27.4	24.9	-11.4			
31	311	4.9	3.7	-3.2	294	6.7	6.1	-2.7	287	10.4	10.0	-3.0	275	17.5	17.4	-1.6	274	27.1	27.0	-2.1	272	32.8	32.8	-1.0	272	24.5	24.5	-1.0			

Daily Normals of Upper Air Winds (1971-2000)

208

LUCKNOW

APRIL

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	297	5.8	5.2	-2.6	296	8.1	7.3	-3.5	290	10.7	10.1	-3.6	285	19.0	18.3	-5.0	280	27.0	26.6	-4.8	274	37.8	37.7	-2.4	271	22.0	22.0	-0.3			
2	295	5.5	5.0	-2.3	292	7.9	7.3	-3.0	290	10.9	10.3	-3.7	274	17.2	17.2	-1.2	267	30.7	30.7	1.7	265	44.1	43.9	4.2	273	26.3	26.3	-1.4			
3	279	4.3	4.2	-0.7	288	7.2	6.9	-2.2	277	10.5	10.4	-1.3	276	17.7	17.6	-2.0	272	26.5	26.5	-0.9	266	35.9	35.8	2.8	263	19.9	19.8	2.3			
4	303	5.9	4.9	-3.2	283	7.0	6.8	-1.6	277	10.3	10.2	-1.3	277	17.2	17.1	-2.0	270	27.2	27.2	-0.1	270	37.1	37.1	0.0	275	22.2	22.1	-1.8			
5	305	4.7	3.9	-2.7	291	6.6	6.2	-2.4	283	10.3	10.0	-2.4	278	16.9	16.7	-2.3	275	27.0	26.9	-2.3	269	35.5	35.5	0.7	278	18.1	17.9	-2.4			
6	289	6.8	6.4	-2.2	288	7.2	6.9	-2.2	283	10.4	10.1	-2.3	276	16.7	16.6	-1.8	277	27.1	26.9	-3.4	270	37.2	37.2	0.1	273	20.0	20.0	-0.9			
7	294	7.3	6.7	-3.0	293	8.2	7.5	-3.2	292	10.8	10.0	-4.1	287	16.7	16.0	-4.8	279	28.2	27.8	-4.6	273	34.7	34.6	-1.9	278	25.9	25.7	-3.4			
8	312	4.2	3.1	-2.8	292	6.3	5.8	-2.4	286	9.1	8.8	-2.5	279	16.1	15.9	-2.4	282	26.0	25.5	-5.3	267	37.3	37.3	1.9	273	20.6	20.6	-1.0			
9	311	4.1	3.1	-2.7	288	7.1	6.7	-2.2	282	10.3	10.1	-2.2	279	16.6	16.4	-2.6	274	31.4	31.3	-2.3	263	38.6	38.3	4.9	271	19.9	19.9	-0.5			
10	292	6.7	6.2	-2.5	286	7.4	7.1	-2.1	293	10.4	9.6	-4.0	289	17.2	16.3	-5.5	288	28.2	26.8	-8.8	280	31.9	31.4	-5.6	277	19.1	18.9	-2.4			
11	304	3.7	3.1	-2.1	295	7.2	6.5	-3.1	290	10.9	10.2	-3.7	289	15.5	14.6	-5.1	285	30.5	29.5	-7.9	288	32.5	30.9	-10.2	284	13.2	12.8	-3.3			
12	316	5.6	3.9	-4.0	294	7.3	6.7	-3.0	294	10.5	9.6	-4.2	287	15.8	15.1	-4.7	284	26.0	25.2	-6.2	281	32.2	31.7	-5.9	283	13.8	13.4	-3.1			
13	307	5.9	4.7	-3.5	292	6.8	6.3	-2.5	286	10.4	10.0	-2.9	283	18.3	17.9	-4.0	276	29.7	29.5	-3.0	275	33.9	33.8	-2.9	275	21.0	20.9	-1.9			
14	198	1.6	0.5	1.5	289	5.2	4.9	-1.7	280	9.6	9.4	-1.7	284	16.3	15.8	-3.8	274	26.6	26.5	-1.9	269	31.2	31.2	0.3	274	21.9	21.8	-1.6			
15	294	2.4	2.2	-1.0	288	5.2	4.9	-1.6	283	8.9	8.7	-2.0	281	14.8	14.5	-2.9	276	22.2	22.1	-2.2	273	26.6	26.6	-1.3	273	15.7	15.7	-0.8			
16	287	4.9	4.7	-1.4	283	5.7	5.5	-1.3	274	9.0	9.0	-0.6	283	14.0	13.7	-3.1	271	23.7	23.7	-0.5	269	30.4	30.4	0.6	268	18.2	18.2	0.5			
17	296	6.8	6.1	-3.0	285	6.4	6.2	-1.7	289	9.3	8.8	-3.0	286	15.7	15.1	-4.3	265	21.7	21.6	1.7	263	27.5	27.3	3.3	272	18.4	18.4	-0.6			
18	294	6.6	6.0	-2.7	294	7.6	6.9	-3.1	288	10.4	9.9	-3.3	284	15.2	14.7	-3.8	274	23.1	23.0	-1.7	273	28.5	28.5	-1.4	276	16.7	16.6	-1.7			
19	292	6.6	6.1	-2.5	296	7.1	6.4	-3.1	290	10.0	9.4	-3.5	288	14.2	13.5	-4.3	281	21.2	20.8	-3.9	275	26.1	26.0	-2.4	272	14.4	14.4	-0.5			
20	296	5.8	5.2	-2.5	290	5.9	5.6	-2.0	291	8.9	8.3	-3.2	281	12.0	11.8	-2.4	277	20.3	20.1	-2.5	265	24.3	24.2	2.3	272	14.1	14.1	-0.5			
21	314	5.0	3.6	-3.5	302	5.8	4.9	-3.1	292	9.5	8.8	-3.5	289	11.9	11.3	-3.8	275	18.9	18.8	-1.6	269	27.0	27.0	0.6	269	19.5	19.5	0.3			
22	283	5.2	5.1	-1.2	285	6.2	6.0	-1.6	286	9.5	9.1	-2.6	286	11.0	10.6	-3.0	271	19.2	19.2	-0.5	273	25.9	25.9	-1.4	272	14.5	14.5	-0.5			
23	301	6.9	5.9	-3.5	294	7.1	6.5	-2.9	284	9.6	9.3	-2.3	285	13.1	12.7	-3.3	282	18.1	17.7	-3.9	270	23.7	23.7	-0.2	286	13.2	12.7	-3.7			
24	297	6.5	5.8	-2.9	291	6.8	6.4	-2.4	289	9.9	9.4	-3.2	293	12.0	11.1	-4.6	276	16.0	15.9	-1.7	271	21.9	21.9	-0.5	290	15.5	14.6	-5.2			
25	307	4.1	3.3	-2.5	291	5.3	5.0	-1.9	287	10.0	9.6	-2.9	296	13.1	11.8	-5.8	288	18.3	17.4	-5.7	275	23.2	23.1	-1.9	282	14.6	14.3	-3.1			
26	319	2.0	1.3	-1.5	279	5.6	5.5	-0.9	291	10.3	9.6	-3.6	297	13.5	12.0	-6.1	286	18.4	17.7	-5.2	294	20.6	18.8	-8.3	290	11.3	10.6	-3.8			
27	307	2.0	1.6	-1.2	291	5.1	4.8	-1.8	289	11.0	10.4	-3.6	296	12.3	11.1	-5.3	282	18.5	18.1	-3.9	285	25.2	24.3	-6.6	282	13.9	13.6	-2.8			
28	297	3.8	3.4	-1.7	291	5.9	5.5	-2.1	289	11.2	10.6	-3.7	290	13.8	12.9	-4.8	285	22.5	21.7	-6.0	273	26.0	26.0	-1.4	274	12.3	12.3	-0.9			
29	268	2.9	2.9	0.1	287	6.7	6.4	-2.0	291	10.9	10.2	-3.9	297	13.9	12.4	-6.2	288	22.3	21.2	-6.9	283	28.3	27.5	-6.5	281	10.6	10.4	-2.0			
30	299	2.6	2.3	-1.3	293	6.7	6.2	-2.6	288	10.8	10.3	-3.4	289	13.6	12.9	-4.4	278	22.3	22.1	-3.0	265	25.4	25.3	2.4	244	8.6	7.7	3.8			

Daily Normals of Upper Air Winds (1971-2000)

209

LUCKNOW

MAY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	298	4.7	4.1	-2.2	286	6.2	6.0	-1.7	289	9.4	8.9	-3.0	287	13.4	12.8	-4.0	275	21.8	21.7	-2.0	267	28.6	28.6	1.5	263	9.1	9.0	1.1
2	293	3.9	3.6	-1.5	289	5.8	5.5	-1.9	282	9.3	9.1	-2.0	283	13.0	12.6	-3.0	278	18.4	18.2	-2.5	271	27.0	27.0	-0.4	269	11.4	11.4	0.2
3	322	3.3	2.0	-2.6	303	5.9	4.9	-3.2	285	10.3	9.9	-2.7	280	13.3	13.1	-2.4	270	20.2	20.2	0.0	267	28.3	28.2	1.7	253	11.4	10.9	3.4
4	292	4.6	4.3	-1.7	293	5.4	5.0	-2.1	289	11.0	10.4	-3.6	289	11.5	10.9	-3.8	275	22.7	22.6	-1.9	268	28.1	28.1	1.1	257	14.8	14.4	3.4
5	299	7.1	6.2	-3.5	290	7.2	6.7	-2.5	291	11.0	10.3	-4.0	294	13.7	12.5	-5.6	280	23.0	22.6	-4.1	270	26.9	26.9	0.0	254	14.6	14.0	4.1
6	293	7.2	6.6	-2.8	292	6.6	6.1	-2.5	292	10.6	9.8	-4.0	292	12.8	11.9	-4.7	286	21.2	20.4	-5.8	267	24.5	24.5	1.1	261	11.3	11.2	1.7
7	300	5.9	5.1	-3.0	283	3.9	3.8	-0.9	288	9.9	9.4	-3.0	290	12.2	11.5	-4.1	276	20.7	20.6	-2.2	271	27.7	27.7	-0.3	267	11.6	11.6	0.7
8	315	3.8	2.7	-2.7	297	6.3	5.6	-2.9	291	11.0	10.2	-4.0	289	13.1	12.4	-4.2	280	21.7	21.4	-3.6	273	22.6	22.6	-1.1	283	13.9	13.6	-3.1
9	342	3.5	1.1	-3.3	287	4.7	4.5	-1.4	290	10.0	9.4	-3.5	283	13.3	13.0	-3.0	276	18.7	18.6	-1.9	271	22.9	22.9	-0.5	286	7.4	7.1	-2.1
10	319	5.3	3.5	-4.0	293	4.9	4.5	-1.9	286	9.5	9.1	-2.6	284	13.0	12.6	-3.1	274	18.3	18.3	-1.3	268	22.6	22.6	0.7	266	8.9	8.9	0.7
11	325	3.5	2.0	-2.9	305	4.0	3.3	-2.3	288	8.9	8.5	-2.7	294	12.4	11.4	-5.0	281	17.4	17.1	-3.2	268	22.8	22.8	0.8	270	10.8	10.8	0.0
12	315	3.7	2.6	-2.6	304	4.1	3.4	-2.3	297	9.2	8.2	-4.2	295	14.0	12.7	-6.0	279	18.5	18.3	-3.0	267	21.4	21.4	1.1	266	13.9	13.9	1.0
13	311	4.5	3.4	-3.0	302	4.4	3.7	-2.3	297	11.1	9.9	-5.0	293	12.4	11.4	-4.8	277	19.3	19.1	-2.4	274	21.2	21.1	-1.5	272	13.8	13.8	-0.4
14	282	3.4	3.3	-0.7	293	4.6	4.2	-1.8	291	10.3	9.6	-3.6	286	11.8	11.3	-3.3	273	21.7	21.7	-1.2	264	24.7	24.6	2.4	263	11.8	11.7	1.5
15	323	3.5	2.1	-2.8	295	5.5	5.0	-2.3	289	9.8	9.3	-3.2	294	12.7	11.6	-5.2	269	18.0	18.0	0.2	264	21.8	21.7	2.3	251	8.4	8.0	2.7
16	342	2.9	0.9	-2.8	297	4.8	4.3	-2.2	290	10.9	10.2	-3.7	287	12.9	12.4	-3.7	271	18.8	18.8	-0.2	263	23.4	23.2	2.9	247	9.9	9.1	3.8
17	356	4.4	0.3	-4.4	301	5.6	4.8	-2.9	296	11.2	10.1	-4.9	295	12.9	11.7	-5.5	275	19.5	19.4	-1.6	268	20.7	20.7	0.7	281	5.2	5.1	-1.0
18	297	2.2	2.0	-1.0	292	5.6	5.2	-2.1	297	10.1	9.0	-4.6	295	13.7	12.4	-5.8	282	20.0	19.5	-4.3	265	22.8	22.7	2.0	265	8.3	8.3	0.7
19	301	2.1	1.8	-1.1	291	5.3	4.9	-1.9	296	9.8	8.8	-4.2	293	12.6	11.6	-5.0	279	19.6	19.3	-3.2	273	21.8	21.8	-1.2	261	11.2	11.1	1.8
20	335	2.3	1.0	-2.1	296	5.5	4.9	-2.4	294	9.2	8.4	-3.8	290	12.6	11.8	-4.4	276	17.1	17.0	-1.9	259	17.7	17.3	3.5	264	7.3	7.3	0.8
21	322	2.9	1.8	-2.3	298	4.0	3.5	-1.9	297	9.7	8.7	-4.4	291	12.0	11.2	-4.3	267	17.0	17.0	1.0	270	19.9	19.9	0.0	257	5.0	4.9	1.1
22	319	4.6	3.0	-3.5	299	5.5	4.8	-2.7	294	8.5	7.8	-3.4	287	12.3	11.8	-3.6	274	18.4	18.4	-1.2	259	19.0	18.7	3.6	248	5.4	5.0	2.0
23	330	2.2	1.1	-1.9	292	5.9	5.5	-2.2	299	11.1	9.7	-5.3	301	12.2	10.5	-6.3	279	15.5	15.3	-2.5	264	17.9	17.8	2.0	252	6.3	6.0	1.9
24	297	3.5	3.1	-1.6	297	4.6	4.1	-2.1	297	9.9	8.8	-4.5	300	12.0	10.4	-5.9	277	15.3	15.2	-1.9	257	16.9	16.5	3.8	216	1.4	0.8	1.1
25	337	3.3	1.3	-3.0	302	4.5	3.8	-2.4	295	10.5	9.5	-4.5	291	11.2	10.5	-4.0	271	13.3	13.3	-0.3	256	16.8	16.3	4.2	243	2.5	2.2	1.1
26	329	0.6	0.3	-0.5	289	3.9	3.7	-1.3	297	9.4	8.4	-4.2	299	10.6	9.2	-5.2	284	11.6	11.3	-2.8	262	13.7	13.6	1.9	254	5.5	5.3	1.5
27	298	1.9	1.7	-0.9	300	5.3	4.6	-2.7	294	9.2	8.4	-3.8	296	10.5	9.4	-4.6	278	14.4	14.2	-2.1	263	15.4	15.3	2.0	232	1.6	1.3	1.0
28	321	2.6	1.6	-2.0	293	6.0	5.5	-2.3	296	10.1	9.1	-4.4	292	11.7	10.8	-4.4	269	16.7	16.7	0.3	260	16.1	15.9	2.8	210	3.4	1.7	3.0
29	314	7.6	5.4	-5.3	294	6.6	6.0	-2.7	289	9.4	8.9	-3.0	285	11.8	11.4	-3.0	268	16.8	16.8	0.7	253	16.3	15.6	4.8	212	2.5	1.3	2.1
30	295	5.2	4.7	-2.2	296	5.9	5.3	-2.6	294	9.0	8.2	-3.7	289	10.5	9.9	-3.4	266	15.8	15.8	1.1	258	17.5	17.1	3.7	223	3.8	2.6	2.8
31	307	3.9	3.1	-2.3	293	5.6	5.1	-2.2	299	9.8	8.6	-4.7	283	9.5	9.2	-2.2	259	14.7	14.4	2.7	250	14.4	13.5	4.9	216	3.6	2.1	2.9

Daily Normals of Upper Air Winds (1971-2000)

210

LUCKNOW

JUNE

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	287	6.9	6.6	-2.0	293	6.6	6.1	-2.6	292	9.9	9.2	-3.7	285	11.2	10.8	-2.9	259	13.7	13.5	2.6	254	13.1	12.6	3.5	227	5.7	4.2	3.9			
2	306	5.7	4.6	-3.3	302	6.7	5.7	-3.5	293	8.9	8.2	-3.4	290	10.2	9.6	-3.4	265	13.6	13.5	1.2	256	12.5	12.1	3.1	180	1.8	0.0	1.8			
3	313	3.4	2.5	-2.3	307	5.0	4.0	-3.0	297	8.7	7.7	-4.0	290	9.1	8.6	-3.1	262	14.2	14.1	2.0	255	14.3	13.8	3.6	233	6.4	5.1	3.8			
4	314	2.8	2.0	-1.9	295	4.0	3.6	-1.7	293	7.8	7.2	-3.1	285	9.0	8.7	-2.3	259	13.8	13.5	2.7	255	14.9	14.4	3.9	256	3.7	3.6	0.9			
5	320	4.2	2.7	-3.2	305	3.8	3.1	-2.2	291	7.9	7.4	-2.8	290	9.2	8.6	-3.2	271	12.3	12.3	-0.2	254	11.1	10.7	3.0	116	3.9	-3.5	1.7			
6	320	3.9	2.5	-3.0	303	3.7	3.1	-2.0	294	7.6	6.9	-3.1	297	8.5	7.5	-3.9	286	12.1	11.6	-3.3	266	10.9	10.9	0.7	72	0.3	-0.3	-0.1			
7	325	2.8	1.6	-2.3	306	3.6	2.9	-2.1	301	8.3	7.1	-4.3	290	8.5	8.0	-2.9	271	12.6	12.6	-0.2	264	11.3	11.2	1.1	21	0.9	-0.3	-0.8			
8	287	3.7	3.5	-1.1	278	2.8	2.8	-0.4	288	7.0	6.6	-2.2	287	7.6	7.3	-2.2	256	10.3	10.0	2.5	253	9.3	8.9	2.8	96	2.8	-2.8	0.3			
9	286	1.8	1.7	-0.5	301	3.3	2.8	-1.7	302	7.0	5.9	-3.7	290	7.1	6.7	-2.4	275	7.0	7.0	-0.6	259	6.5	6.4	1.2	94	4.0	-4.0	0.3			
10	9	1.2	-0.2	-1.2	305	2.8	2.3	-1.6	301	8.3	7.1	-4.3	290	8.1	7.6	-2.7	258	9.7	9.5	2.1	255	7.6	7.3	2.0	147	3.1	-1.7	2.6			
11	360	1.3	0.0	-1.3	315	3.1	2.2	-2.2	306	7.8	6.3	-4.6	291	8.2	7.7	-2.9	265	9.2	9.2	0.8	264	8.1	8.0	0.9	135	2.4	-1.7	1.7			
12	337	3.0	1.2	-2.8	319	4.1	2.7	-3.1	302	7.5	6.3	-4.0	287	8.1	7.7	-2.4	258	9.8	9.6	2.1	242	7.6	6.7	3.6	108	2.6	-2.5	0.8			
13	19	2.1	-0.7	-2.0	302	4.0	3.4	-2.1	300	6.4	5.5	-3.2	290	6.4	6.0	-2.2	257	8.6	8.4	1.9	250	7.2	6.7	2.5	103	5.0	-4.9	1.1			
14	348	3.5	0.7	-3.4	307	3.6	2.9	-2.2	301	7.7	6.6	-3.9	286	6.6	6.4	-1.8	286	6.3	6.1	-1.7	258	4.5	4.4	0.9	91	7.0	-7.0	0.1			
15	43	2.3	-1.6	-1.7	302	3.8	3.2	-2.0	305	6.6	5.4	-3.8	293	6.5	6.0	-2.5	280	6.6	6.5	-1.1	268	4.9	4.9	0.2	117	4.6	-4.1	2.1			
16	52	1.1	-0.9	-0.7	291	2.5	2.3	-0.9	308	5.6	4.4	-3.4	301	5.6	4.8	-2.9	266	6.0	6.0	0.4	255	3.1	3.0	0.8	122	2.6	-2.2	1.4			
17	55	1.2	-1.0	-0.7	288	1.3	1.2	-0.4	312	5.2	3.9	-3.5	285	5.3	5.1	-1.4	263	6.5	6.5	0.8	264	4.1	4.1	0.4	81	6.3	-6.2	-1.0			
18	112	3.8	-3.5	1.4	332	2.1	1.0	-1.9	319	5.3	3.5	-4.0	301	4.9	4.2	-2.5	257	4.7	4.6	1.1	234	4.3	3.5	2.5	105	5.2	-5.0	1.3			
19	73	2.8	-2.7	-0.8	317	1.9	1.3	-1.4	309	4.8	3.7	-3.0	283	4.4	4.3	-1.0	257	3.7	3.6	0.8	215	1.2	0.7	1.0	93	6.2	-6.2	0.3			
20	97	2.5	-2.5	0.3	313	2.2	1.6	-1.5	302	5.5	4.7	-2.9	291	4.5	4.2	-1.6	240	4.3	3.7	2.1	236	3.0	2.5	1.7	86	5.7	-5.7	-0.4			
21	77	1.3	-1.3	-0.3	304	1.1	0.9	-0.6	290	2.7	2.5	-0.9	279	3.9	3.9	-0.6	225	2.1	1.5	1.5	172	1.4	-0.2	1.4	76	8.3	-8.1	-2.0			
22	68	1.1	-1.0	-0.4	5	1.1	-0.1	-1.1	313	2.6	1.9	-1.8	296	2.5	2.3	-1.1	249	3.3	3.1	1.2	176	2.6	-0.2	2.6	92	5.6	-5.6	0.2			
23	282	3.4	3.3	-0.7	317	1.6	1.1	-1.2	316	3.5	2.4	-2.5	299	2.5	2.2	-1.2	209	1.8	0.9	1.6	163	3.0	-0.9	2.9	103	7.7	-7.5	1.7			
24	15	2.4	-0.6	-2.3	330	0.8	0.4	-0.7	312	2.7	2.0	-1.8	285	3.0	2.9	-0.8	214	2.2	1.2	1.8	187	3.3	0.4	3.3	96	8.3	-8.3	0.8			
25	290	1.2	1.1	-0.4	311	1.8	1.4	-1.2	291	2.6	2.4	-0.9	308	1.1	0.9	-0.7	360	0.1	0.0	-0.1	112	3.1	-2.9	1.2	88	9.9	-9.9	-0.3			
26	34	2.9	-1.6	-2.4	330	1.4	0.7	-1.2	298	1.9	1.7	-0.9	306	1.4	1.1	-0.8	112	0.5	-0.5	0.2	131	4.0	-3.0	2.6	102	10.6	-10.4	2.2			
27	19	3.1	-1.0	-2.9	45	1.7	-1.2	-1.2	353	2.5	0.3	-2.5	45	0.1	-0.1	-0.1	172	1.4	-0.2	1.4	156	1.0	-0.4	0.9	87	9.0	-9.0	-0.4			
28	45	1.1	-0.8	-0.8	68	1.6	-1.5	-0.6	331	2.1	1.0	-1.8	311	0.9	0.7	-0.6	163	1.0	-0.3	1.0	102	2.4	-2.3	0.5	81	11.3	-11.2	-1.8			
29	31	3.1	-1.6	-2.7	315	1.6	1.1	-1.1	306	2.7	2.2	-1.6	297	0.9	0.8	-0.4	225	1.6	1.1	1.1	113	4.1	-3.8	1.6	86	9.4	-9.4	-0.7			
30	328	0.9	0.5	-0.8	313	2.3	1.7	-1.6	306	3.6	2.9	-2.1	297	1.3	1.2	-0.6	207	0.7	0.3	0.6	134	2.9	-2.1	2.0	75	10.2	-9.8	-2.7			

Daily Normals of Upper Air Winds (1971-2000)

211

LUCKNOW

JULY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	279	1.3	1.3	-0.2	283	2.2	2.1	-0.5	292	2.7	2.5	-1.0	279	3.1	3.1	-0.5	266	1.3	1.3	0.1	94	4.2	-4.2	0.3	81	11.4	-11.3	-1.7			
2	13	1.7	-0.4	-1.7	315	1.3	0.9	-0.9	298	3.2	2.8	-1.5	306	2.6	2.1	-1.5	189	1.3	0.2	1.3	133	3.3	-2.4	2.2	92	10.6	-10.6	0.4			
3	25	1.9	-0.8	-1.7	310	1.7	1.3	-1.1	313	4.0	2.9	-2.7	335	1.4	0.6	-1.3	131	0.9	-0.7	0.6	129	3.6	-2.8	2.3	85	13.8	-13.7	-1.3			
4	63	3.5	-3.1	-1.6	286	2.5	2.4	-0.7	307	3.8	3.0	-2.3	325	2.1	1.2	-1.7	207	1.8	0.8	1.6	128	3.9	-3.1	2.4	92	12.6	-12.6	0.4			
5	343	1.4	0.4	-1.3	317	2.1	1.4	-1.5	319	4.0	2.6	-3.0	7	1.6	-0.2	-1.6	141	2.2	-1.4	1.7	139	3.3	-2.2	2.5	88	13.5	-13.5	-0.5			
6	313	3.5	2.6	-2.4	307	1.5	1.2	-0.9	328	2.6	1.4	-2.2	19	1.8	-0.6	-1.7	123	2.4	-2.0	1.3	123	3.0	-2.5	1.6	89	11.9	-11.9	-0.3			
7	315	0.4	0.3	-0.3	333	1.3	0.6	-1.2	295	2.1	1.9	-0.9	129	0.6	-0.5	0.4	101	3.1	-3.0	0.6	110	4.8	-4.5	1.6	83	15.4	-15.3	-1.9			
8	54	1.4	-1.1	-0.8	354	1.0	0.1	-1.0	349	1.0	0.2	-1.0	5	1.2	-0.1	-1.2	112	3.5	-3.2	1.3	112	7.9	-7.3	3.0	96	16.1	-16.0	1.8			
9	349	1.0	0.2	-1.0	36	0.9	-0.5	-0.7	343	1.7	0.5	-1.6	90	0.9	-0.9	0.0	108	3.9	-3.7	1.2	100	4.0	-3.9	0.7	83	14.0	-13.9	-1.7			
10	360	0.9	0.0	-0.9	52	1.8	-1.4	-1.1	340	3.2	1.1	-3.0	42	1.5	-1.0	-1.1	102	3.3	-3.2	0.7	107	8.4	-8.0	2.4	89	15.9	-15.9	-0.4			
11	81	2.5	-2.5	-0.4	129	0.6	-0.5	0.4	279	0.6	0.6	-0.1	87	1.9	-1.9	-0.1	108	3.8	-3.6	1.2	106	4.4	-4.2	1.2	91	10.4	-10.4	0.1			
12	60	3.0	-2.6	-1.5	85	2.3	-2.3	-0.2	51	1.4	-1.1	-0.9	67	1.5	-1.4	-0.6	96	3.8	-3.8	0.4	96	6.4	-6.4	0.7	80	16.5	-16.2	-3.0			
13	98	3.0	-3.0	0.4	114	3.0	-2.7	1.2	100	2.3	-2.3	0.4	126	2.2	-1.8	1.3	119	4.1	-3.6	2.0	117	4.9	-4.4	2.2	88	13.0	-13.0	-0.4			
14	117	3.4	-3.0	1.5	114	2.0	-1.8	0.8	146	0.4	-0.2	0.3	145	1.2	-0.7	1.0	82	2.9	-2.9	-0.4	91	4.3	-4.3	0.1	77	11.0	-10.7	-2.5			
15	83	3.1	-3.1	-0.4	117	1.6	-1.4	0.7	132	1.5	-1.1	1.0	112	2.2	-2.0	0.8	84	4.5	-4.5	-0.5	86	8.2	-8.2	-0.6	85	14.8	-14.7	-1.3			
16	76	4.6	-4.5	-1.1	106	1.9	-1.8	0.5	270	0.4	0.4	0.0	360	0.2	0.0	-0.2	79	4.9	-4.8	-0.9	81	6.3	-6.2	-1.0	86	14.4	-14.4	-0.9			
17	122	2.8	-2.4	1.5	180	1.8	0.0	1.8	201	0.9	0.3	0.8	63	1.3	-1.2	-0.6	88	3.7	-3.7	-0.1	81	6.5	-6.4	-1.0	83	14.3	-14.2	-1.8			
18	148	1.9	-1.0	1.6	152	2.1	-1.0	1.9	135	0.6	-0.4	0.4	84	2.7	-2.7	-0.3	75	4.8	-4.6	-1.2	80	6.8	-6.7	-1.2	88	16.8	-16.8	-0.7			
19	118	1.7	-1.5	0.8	90	2.2	-2.2	0.0	51	0.6	-0.5	-0.4	82	2.1	-2.1	-0.3	85	3.8	-3.8	-0.3	70	6.6	-6.2	-2.3	83	16.5	-16.4	-1.9			
20	191	1.0	0.2	1.0	153	1.3	-0.6	1.2	114	1.0	-0.9	0.4	104	3.2	-3.1	0.8	117	5.7	-5.1	2.6	97	10.5	-10.4	1.3	85	16.6	-16.5	-1.5			
21	180	2.2	0.0	2.2	126	2.6	-2.1	1.5	141	1.9	-1.2	1.5	106	4.7	-4.5	1.3	96	6.6	-6.6	0.7	91	8.1	-8.1	0.2	96	12.6	-12.5	1.3			
22	161	1.8	-0.6	1.7	131	2.1	-1.6	1.4	134	3.2	-2.3	2.2	111	3.0	-2.8	1.1	88	6.5	-6.5	-0.2	85	9.8	-9.8	-0.8	85	15.4	-15.3	-1.4			
23	238	0.9	0.8	0.5	144	2.4	-1.4	1.9	122	2.8	-2.4	1.5	97	4.1	-4.1	0.5	101	7.0	-6.9	1.4	98	9.1	-9.0	1.3	92	15.4	-15.4	0.5			
24	176	1.4	-0.1	1.4	180	2.5	0.0	2.5	195	1.1	0.3	1.1	104	1.6	-1.6	0.4	95	4.4	-4.4	0.4	84	8.3	-8.3	-0.8	85	17.0	-16.9	-1.6			
25	125	1.2	-1.0	0.7	211	2.3	1.2	2.0	180	1.6	0.0	1.6	142	1.1	-0.7	0.9	95	4.2	-4.2	0.4	84	8.1	-8.1	-0.9	86	16.2	-16.2	-1.1			
26	166	1.2	-0.3	1.2	287	2.7	2.6	-0.8	270	1.2	1.2	0.0	99	1.8	-1.8	0.3	78	5.2	-5.1	-1.1	75	7.2	-6.9	-1.9	78	15.3	-15.0	-3.1			
27	110	2.0	-1.9	0.7	252	0.6	0.6	0.2	329	0.6	0.3	-0.5	73	1.0	-1.0	-0.3	77	5.4	-5.3	-1.2	85	7.7	-7.7	-0.7	83	17.1	-17.0	-2.2			
28	90	3.1	-3.1	0.0	270	0.1	0.1	0.0	51	1.4	-1.1	-0.9	71	2.1	-2.0	-0.7	83	6.2	-6.1	-0.8	85	8.0	-8.0	-0.7	91	16.5	-16.5	0.4			
29	105	5.9	-5.7	1.5	69	0.9	-0.8	-0.3	115	1.4	-1.3	0.6	98	4.2	-4.2	0.6	90	7.5	-7.5	0.0	102	9.3	-9.1	2.0	93	18.6	-18.6	1.0			
30	133	1.9	-1.4	1.3	117	0.4	-0.4	0.2	118	1.5	-1.3	0.7	108	3.5	-3.3	1.1	93	6.5	-6.5	0.3	89	10.1	-10.1	-0.1	93	19.6	-19.6	1.1			
31	97	2.4	-2.4	0.3	140	0.8	-0.5	0.6	112	1.1	-1.0	0.4	66	2.0	-1.8	-0.8	77	6.3	-6.1	-1.4	78	8.7	-8.5	-1.8	89	18.5	-18.5	-0.3			

Daily Normals of Upper Air Winds (1971-2000)

LUCKNOW

AUGUST

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	127	2.1	-1.7	1.3	170	1.7	-0.3	1.7	135	0.3	-0.2	0.2	101	1.5	-1.5	0.3	86	6.8	-6.8	-0.5	73	9.7	-9.3	-2.8	87	17.2	-17.2	-1.0
2	122	1.5	-1.3	0.8	129	2.2	-1.7	1.4	127	1.5	-1.2	0.9	107	3.0	-2.9	0.9	90	6.5	-6.5	0.0	77	10.4	-10.1	-2.4	89	14.7	-14.7	-0.2
3	36	1.4	-0.8	-1.1	98	2.9	-2.9	0.4	101	3.3	-3.2	0.6	96	3.8	-3.8	0.4	88	5.0	-5.0	-0.2	85	7.6	-7.6	-0.6	84	16.2	-16.1	-1.8
4	82	1.5	-1.5	-0.2	103	2.6	-2.5	0.6	94	3.0	-3.0	0.2	102	1.9	-1.9	0.4	68	5.2	-4.8	-1.9	74	7.8	-7.5	-2.1	98	14.1	-14.0	2.0
5	43	2.1	-1.4	-1.5	104	2.1	-2.0	0.5	106	2.6	-2.5	0.7	93	1.7	-1.7	0.1	89	7.3	-7.3	-0.1	87	11.0	-11.0	-0.5	91	16.4	-16.4	0.4
6	157	1.3	-0.5	1.2	117	3.1	-2.8	1.4	103	3.7	-3.6	0.8	100	4.7	-4.6	0.8	97	7.2	-7.1	0.9	85	9.6	-9.6	-0.9	85	16.9	-16.8	-1.5
7	218	1.1	0.7	0.9	101	2.6	-2.6	0.5	108	2.8	-2.7	0.9	99	4.5	-4.4	0.7	98	9.0	-8.9	1.3	86	7.9	-7.9	-0.5	86	16.5	-16.5	-1.2
8	171	1.2	-0.2	1.2	115	3.5	-3.2	1.5	117	5.4	-4.8	2.4	113	5.3	-4.9	2.1	98	8.9	-8.8	1.2	81	11.0	-10.9	-1.7	88	17.2	-17.2	-0.6
9	77	2.2	-2.1	-0.5	124	4.5	-3.7	2.5	116	3.9	-3.5	1.7	115	5.0	-4.5	2.1	91	7.6	-7.6	0.1	73	11.4	-10.9	-3.4	79	20.6	-20.2	-3.8
10	105	3.4	-3.3	0.9	128	2.8	-2.2	1.7	146	1.8	-1.0	1.5	135	2.5	-1.8	1.8	102	7.5	-7.3	1.5	84	10.0	-9.9	-1.0	82	15.5	-15.3	-2.2
11	119	1.3	-1.1	0.6	157	0.8	-0.3	0.7	67	1.3	-1.2	-0.5	81	1.9	-1.9	-0.3	84	5.0	-5.0	-0.5	83	5.4	-5.4	-0.7	79	14.8	-14.5	-2.8
12	273	1.8	1.8	-0.1	307	0.5	0.4	-0.3	34	0.4	-0.2	-0.3	90	1.8	-1.8	0.0	79	4.2	-4.1	-0.8	81	6.7	-6.6	-1.1	90	13.0	-13.0	-0.1
13	272	2.9	2.9	-0.1	132	1.3	-1.0	0.9	85	1.2	-1.2	-0.1	77	1.3	-1.3	-0.3	108	2.5	-2.4	0.8	111	6.0	-5.6	2.1	88	12.2	-12.2	-0.4
14	292	3.7	3.4	-1.4	118	1.7	-1.5	0.8	96	2.7	-2.7	0.3	67	2.1	-1.9	-0.8	98	3.0	-3.0	0.4	100	4.5	-4.4	0.8	100	13.3	-13.1	2.4
15	—	—	—	—	87	2.1	-2.1	-0.1	90	2.9	-2.9	0.0	107	2.4	-2.3	0.7	122	3.6	-3.0	1.9	96	6.2	-6.2	0.6	96	13.3	-13.2	1.3
16	43	1.6	-1.1	-1.2	106	2.6	-2.5	0.7	98	2.8	-2.8	0.4	119	2.6	-2.3	1.3	125	2.4	-2.0	1.4	107	6.4	-6.1	1.9	93	15.0	-15.0	0.9
17	60	0.8	-0.7	-0.4	127	1.0	-0.8	0.6	74	0.7	-0.7	-0.2	131	1.1	-0.8	0.7	105	3.5	-3.4	0.9	90	6.4	-6.4	0.0	85	13.4	-13.3	-1.2
18	107	1.7	-1.6	0.5	130	0.8	-0.6	0.5	354	1.0	0.1	-1.0	70	2.3	-2.2	-0.8	111	4.2	-3.9	1.5	98	5.7	-5.6	0.8	97	15.2	-15.1	1.9
19	106	2.6	-2.5	0.7	99	2.0	-2.0	0.3	97	2.5	-2.5	0.3	81	2.6	-2.6	-0.4	105	3.4	-3.3	0.9	94	5.2	-5.2	0.4	86	12.9	-12.9	-0.9
20	98	2.2	-2.2	0.3	94	1.6	-1.6	0.1	111	2.2	-2.1	0.8	105	2.8	-2.7	0.7	99	3.2	-3.2	0.5	96	7.6	-7.6	0.8	98	13.3	-13.2	1.8
21	45	2.4	-1.7	-1.7	76	0.4	-0.4	-0.1	61	1.0	-0.9	-0.5	68	2.4	-2.2	-0.9	107	3.1	-3.0	0.9	119	5.5	-4.8	2.7	98	13.4	-13.3	1.8
22	126	1.9	-1.5	1.1	90	3.3	-3.3	0.0	81	2.6	-2.6	-0.4	93	3.4	-3.4	0.2	113	4.4	-4.1	1.7	84	6.6	-6.6	-0.7	83	14.0	-13.9	-1.6
23	122	1.9	-1.6	1.0	77	1.8	-1.8	-0.4	71	1.8	-1.7	-0.6	95	1.1	-1.1	0.1	60	0.8	-0.7	-0.4	122	4.9	-4.1	2.6	92	15.2	-15.2	0.5
24	124	0.4	-0.3	0.2	207	0.4	0.2	0.4	16	0.7	-0.2	-0.7	108	1.6	-1.5	0.5	104	3.0	-2.9	0.7	93	5.0	-5.0	0.3	98	11.0	-10.9	1.6
25	121	1.2	-1.0	0.6	286	0.7	0.7	-0.2	304	1.4	1.2	-0.8	184	1.3	0.1	1.3	103	2.2	-2.1	0.5	111	4.5	-4.2	1.6	98	14.2	-14.1	1.9
26	109	2.1	-2.0	0.7	146	0.4	-0.2	0.3	98	1.4	-1.4	0.2	119	2.5	-2.2	1.2	118	2.4	-2.1	1.1	122	4.5	-3.8	2.4	103	11.3	-11.0	2.6
27	141	1.4	-0.9	1.1	87	1.9	-1.9	-0.1	96	2.0	-2.0	0.2	96	3.1	-3.1	0.3	93	3.6	-3.6	0.2	96	5.3	-5.3	0.6	94	10.2	-10.2	0.8
28	31	2.3	-1.2	-2.0	96	1.9	-1.9	0.2	97	1.7	-1.7	0.2	106	3.3	-3.2	0.9	128	2.9	-2.3	1.8	111	3.9	-3.6	1.4	97	11.4	-11.3	1.4
29	43	2.1	-1.4	-1.5	97	2.5	-2.5	0.3	99	2.5	-2.5	0.4	120	3.4	-2.9	1.7	143	2.5	-1.5	2.0	122	5.1	-4.3	2.7	85	10.5	-10.5	-1.0
30	76	2.1	-2.0	-0.5	103	2.8	-2.7	0.6	106	3.2	-3.1	0.9	95	3.4	-3.4	0.3	119	2.9	-2.5	1.4	129	4.1	-3.2	2.6	97	10.0	-9.9	1.3
31	48	3.0	-2.2	-2.0	87	2.0	-2.0	-0.1	83	1.7	-1.7	-0.2	86	1.4	-1.4	-0.1	124	2.7	-2.2	1.5	125	4.0	-3.3	2.3	98	9.0	-8.9	1.3

Daily Normals of Upper Air Winds (1971-2000)

213

LUCKNOW

SEPTEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	45	2.8	-2.0	-2.0	97	1.7	-1.7	0.2	118	1.5	-1.3	0.7	70	1.2	-1.1	-0.4	165	2.3	-0.6	2.2	135	2.8	-2.0	2.0	112	6.8	-6.3	2.5
2	107	3.7	-3.5	1.1	114	1.0	-0.9	0.4	106	1.5	-1.4	0.4	138	1.5	-1.0	1.1	129	2.2	-1.7	1.4	88	3.4	-3.4	-0.1	94	11.1	-11.1	0.7
3	98	5.5	-5.4	0.8	90	1.3	-1.3	0.0	63	0.9	-0.8	-0.4	37	0.5	-0.3	-0.4	135	1.8	-1.3	1.3	123	3.5	-2.9	1.9	101	8.6	-8.4	1.7
4	88	5.1	-5.1	-0.2	80	1.7	-1.7	-0.3	63	1.6	-1.4	-0.7	113	0.8	-0.7	0.3	137	2.6	-1.8	1.9	121	2.1	-1.8	1.1	96	10.2	-10.1	1.1
5	98	3.7	-3.7	0.5	41	1.1	-0.7	-0.8	18	1.9	-0.6	-1.8	346	0.8	0.2	-0.8	146	1.1	-0.6	0.9	97	1.7	-1.7	0.2	92	8.6	-8.6	0.3
6	90	3.0	-3.0	0.0	292	0.5	0.5	-0.2	318	1.3	0.9	-1.0	266	1.4	1.4	0.1	105	1.6	-1.5	0.4	140	2.5	-1.6	1.9	86	9.8	-9.8	-0.7
7	81	4.0	-4.0	-0.6	56	0.7	-0.6	-0.4	27	0.9	-0.4	-0.8	73	1.7	-1.6	-0.5	106	1.5	-1.4	0.4	123	5.1	-4.3	2.8	95	8.5	-8.5	0.8
8	138	4.6	-3.1	3.4	153	0.7	-0.3	0.6	211	0.6	0.3	0.5	153	1.8	-0.8	1.6	174	2.8	-0.3	2.8	179	3.9	-0.1	3.9	102	8.4	-8.2	1.7
9	97	2.5	-2.5	0.3	56	1.4	-1.2	-0.8	360	0.2	0.0	-0.2	263	0.8	0.8	0.1	205	3.8	1.6	3.5	176	4.7	-0.3	4.7	116	7.1	-6.4	3.1
10	149	1.7	-0.9	1.5	41	0.9	-0.6	-0.7	53	1.0	-0.8	-0.6	297	0.4	0.4	-0.2	208	4.0	1.9	3.5	185	4.2	0.4	4.2	116	7.4	-6.7	3.2
11	222	1.2	0.8	0.9	56	0.7	-0.6	-0.4	6	1.8	-0.2	-1.8	281	1.0	1.0	-0.2	235	3.3	2.7	1.9	186	3.8	0.4	3.8	106	8.0	-7.7	2.2
12	356	1.4	0.1	-1.4	337	2.3	0.9	-2.1	335	1.4	0.6	-1.3	283	1.8	1.8	-0.4	247	3.6	3.3	1.4	223	3.5	2.4	2.6	105	6.1	-5.9	1.6
13	41	3.2	-2.1	-2.4	30	2.0	-1.0	-1.7	351	1.8	0.3	-1.8	290	1.5	1.4	-0.5	243	3.6	3.2	1.6	238	3.4	2.9	1.8	89	5.4	-5.4	-0.1
14	35	2.8	-1.6	-2.3	346	2.1	0.5	-2.0	315	0.8	0.6	-0.6	289	2.4	2.3	-0.8	245	3.8	3.5	1.6	207	2.8	1.3	2.5	119	5.6	-4.9	2.7
15	31	3.1	-1.6	-2.7	360	1.4	0.0	-1.4	295	1.7	1.5	-0.7	210	2.2	1.1	1.9	254	4.3	4.1	1.2	192	5.2	1.1	5.1	101	4.1	-4.0	0.8
16	45	3.0	-2.1	-2.1	360	1.2	0.0	-1.2	299	1.0	0.9	-0.5	268	2.3	2.3	0.1	252	6.0	5.7	1.8	233	5.6	4.5	3.4	105	2.7	-2.6	0.7
17	57	2.0	-1.7	-1.1	349	1.5	0.3	-1.5	315	1.7	1.2	-1.2	275	3.4	3.4	-0.3	250	6.7	6.3	2.3	252	6.0	5.7	1.8	120	2.4	-2.1	1.2
18	27	1.6	-0.7	-1.4	360	0.6	0.0	-0.6	4	1.4	-0.1	-1.4	287	3.0	2.9	-0.9	265	6.1	6.1	0.5	244	5.7	5.1	2.5	162	2.3	-0.7	2.2
19	356	1.6	0.1	-1.6	306	2.4	1.9	-1.4	319	1.8	1.2	-1.4	276	4.1	4.1	-0.4	247	5.7	5.3	2.2	234	6.0	4.9	3.5	121	3.3	-2.8	1.7
20	348	1.4	0.3	-1.4	303	2.7	2.3	-1.5	304	2.2	1.8	-1.2	272	3.4	3.4	-0.1	245	6.5	5.9	2.7	246	8.7	8.0	3.5	120	1.6	-1.4	0.8
21	335	1.9	0.8	-1.7	344	2.2	0.6	-2.1	347	1.8	0.4	-1.8	274	3.9	3.9	-0.3	245	9.1	8.3	3.8	245	11.1	10.1	4.7	206	2.8	1.2	2.5
22	329	2.1	1.1	-1.8	360	1.4	0.0	-1.4	317	2.2	1.5	-1.6	264	4.1	4.1	0.4	246	9.5	8.7	3.8	253	9.7	9.3	2.9	225	1.3	0.9	0.9
23	318	1.2	0.8	-0.9	14	0.4	-0.1	-0.4	318	1.2	0.8	-0.9	286	2.9	2.8	-0.8	261	9.9	9.8	1.6	258	9.3	9.1	2.0	193	3.7	0.8	3.6
24	342	1.6	0.5	-1.5	353	0.8	0.1	-0.8	345	2.0	0.5	-1.9	269	3.9	3.9	0.1	260	9.9	9.8	1.7	254	10.4	10.0	2.8	159	0.9	-0.3	0.8
25	338	2.4	0.9	-2.2	360	1.4	0.0	-1.4	326	2.9	1.6	-2.4	292	5.2	4.8	-1.9	257	9.8	9.5	2.2	250	10.0	9.4	3.5	239	2.7	2.3	1.4
26	322	2.4	1.5	-1.9	330	2.2	1.1	-1.9	340	3.3	1.1	-3.1	288	5.2	5.0	-1.6	259	9.9	9.7	1.8	249	11.3	10.5	4.1	217	2.5	1.5	2.0
27	352	2.2	0.3	-2.2	319	3.7	2.4	-2.8	309	3.6	2.8	-2.3	280	4.8	4.7	-0.8	257	11.1	10.8	2.4	251	12.9	12.2	4.3	252	3.6	3.4	1.1
28	297	2.0	1.8	-0.9	324	2.4	1.4	-1.9	336	2.2	0.9	-2.0	270	4.8	4.8	0.0	261	11.5	11.4	1.8	254	12.3	11.8	3.3	277	3.1	3.1	-0.4
29	355	2.1	0.2	-2.1	338	2.2	0.8	-2.0	321	3.3	2.1	-2.6	280	5.3	5.2	-0.9	255	12.3	11.9	3.2	253	15.3	14.6	4.6	264	5.4	5.4	0.6
30	324	2.2	1.3	-1.8	323	3.0	1.8	-2.4	326	3.4	1.9	-2.8	283	7.3	7.1	-1.6	255	11.8	11.4	3.0	245	12.9	11.7	5.4	243	2.8	2.5	1.3

Daily Normals of Upper Air Winds (1971-2000)

214

LUCKNOW

OCTOBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	356	2.6	0.2	-2.6	333	3.6	1.6	-3.2	317	4.7	3.2	-3.4	277	6.4	6.4	-0.8	251	13.8	13.0	4.5	251	13.4	12.7	4.3	232	3.1	2.4	1.9			
2	324	2.9	1.7	-2.3	322	3.1	1.9	-2.4	321	4.3	2.7	-3.3	279	6.3	6.2	-1.0	254	13.5	13.0	3.7	251	17.1	16.2	5.6	252	7.1	6.8	2.2			
3	20	2.0	-0.7	-1.9	318	2.5	1.7	-1.9	299	2.6	2.3	-1.3	286	6.0	5.8	-1.7	257	15.4	15.0	3.5	257	16.3	15.9	3.8	245	5.7	5.2	2.4			
4	45	0.1	-0.1	-0.1	311	1.1	0.8	-0.7	286	1.5	1.4	-0.4	264	5.8	5.8	0.6	254	13.9	13.3	3.9	253	15.7	15.0	4.5	193	4.5	1.0	4.4			
5	338	1.1	0.4	-1.0	326	2.3	1.3	-1.9	322	2.3	1.4	-1.8	283	6.1	5.9	-1.4	258	12.4	12.1	2.5	249	16.6	15.5	5.9	251	5.4	5.1	1.8			
6	13	1.7	-0.4	-1.7	340	2.3	0.8	-2.2	312	3.1	2.3	-2.1	274	7.4	7.4	-0.5	252	13.3	12.7	4.1	256	16.7	16.2	4.1	239	4.9	4.2	2.5			
7	336	1.7	0.7	-1.6	315	3.1	2.2	-2.2	308	3.6	2.8	-2.2	272	7.1	7.1	-0.2	261	14.9	14.7	2.4	252	15.5	14.8	4.7	231	6.6	5.1	4.2			
8	346	2.1	0.5	-2.0	309	2.1	1.6	-1.3	315	4.0	2.8	-2.8	271	6.2	6.2	-0.1	255	15.4	14.8	4.1	249	17.6	16.4	6.3	245	8.1	7.4	3.4			
9	332	2.4	1.1	-2.1	308	2.8	2.2	-1.7	304	5.2	4.3	-2.9	284	9.3	9.0	-2.3	266	17.0	17.0	1.3	263	19.1	19.0	2.3	262	5.6	5.5	0.8			
10	297	1.8	1.6	-0.8	308	3.9	3.1	-2.4	305	6.2	5.1	-3.6	281	11.3	11.1	-2.1	265	16.9	16.8	1.5	258	18.8	18.4	3.8	248	7.0	6.5	2.6			
11	338	1.6	0.6	-1.5	309	3.3	2.6	-2.1	303	6.1	5.1	-3.3	279	10.9	10.8	-1.7	264	18.2	18.1	2.0	262	22.3	22.1	3.1	260	9.5	9.4	1.6			
12	315	1.4	1.0	-1.0	311	4.0	3.0	-2.6	302	5.2	4.4	-2.7	274	9.3	9.3	-0.6	261	17.3	17.1	2.6	259	20.2	19.8	4.0	258	12.5	12.2	2.7			
13	296	3.2	2.9	-1.4	309	3.6	2.8	-2.3	303	5.9	4.9	-3.2	282	9.4	9.2	-2.0	260	17.9	17.6	3.0	258	21.6	21.1	4.4	267	11.7	11.7	0.7			
14	305	3.3	2.7	-1.9	303	4.2	3.5	-2.3	307	5.4	4.3	-3.2	276	9.1	9.1	-0.9	261	20.7	20.4	3.3	255	23.9	23.1	6.0	255	9.9	9.6	2.5			
15	326	3.0	1.7	-2.5	315	4.4	3.1	-3.1	301	4.2	3.6	-2.2	279	9.6	9.5	-1.5	265	19.3	19.2	1.7	257	25.1	24.4	5.7	259	11.6	11.4	2.3			
16	339	1.4	0.5	-1.3	319	2.8	1.8	-2.1	291	4.0	3.7	-1.4	284	9.3	9.0	-2.2	263	18.0	17.9	2.1	259	21.6	21.2	4.2	259	8.9	8.7	1.7			
17	305	1.6	1.3	-0.9	321	3.6	2.3	-2.8	301	3.5	3.0	-1.8	283	9.9	9.6	-2.3	263	23.9	23.7	3.0	260	23.7	23.3	4.2	262	12.1	12.0	1.7			
18	329	1.2	0.6	-1.0	309	3.5	2.7	-2.2	291	4.9	4.6	-1.8	281	10.3	10.1	-1.9	261	23.0	22.7	3.6	259	24.7	24.3	4.6	251	8.7	8.2	2.9			
19	298	2.1	1.9	-1.0	311	4.1	3.1	-2.7	304	5.0	4.1	-2.8	279	9.8	9.7	-1.6	261	23.8	23.5	3.8	260	26.0	25.6	4.4	278	10.4	10.3	-1.4			
20	285	2.8	2.7	-0.7	306	3.9	3.2	-2.3	307	5.4	4.3	-3.2	284	12.1	11.7	-3.0	266	23.7	23.6	1.7	261	25.6	25.3	3.8	262	11.1	11.0	1.6			
21	308	1.8	1.4	-1.1	313	3.4	2.5	-2.3	319	5.5	3.6	-4.2	284	11.0	10.7	-2.7	270	22.4	22.4	0.0	267	23.3	23.3	1.1	261	14.2	14.0	2.3			
22	313	3.8	2.8	-2.6	310	3.8	2.9	-2.4	311	4.9	3.7	-3.2	282	10.3	10.1	-2.2	272	22.9	22.9	-0.7	272	28.5	28.5	-1.2	256	13.9	13.5	3.4			
23	308	2.9	2.3	-1.8	310	3.3	2.5	-2.1	302	4.4	3.7	-2.3	274	10.0	10.0	-0.7	266	25.2	25.1	1.9	264	30.7	30.5	3.1	265	13.0	12.9	1.2			
24	295	2.9	2.6	-1.2	310	3.0	2.3	-1.9	307	4.5	3.6	-2.7	281	9.6	9.4	-1.9	269	24.8	24.8	0.4	263	28.8	28.6	3.6	255	10.5	10.1	2.7			
25	315	1.7	1.2	-1.2	303	3.3	2.8	-1.8	302	6.0	5.1	-3.2	276	13.3	13.2	-1.3	263	28.8	28.6	3.3	261	30.6	30.2	4.7	261	17.2	17.0	2.7			
26	315	2.1	1.5	-1.5	311	3.8	2.9	-2.5	297	5.9	5.2	-2.7	288	12.0	11.4	-3.7	272	25.9	25.9	-0.9	267	31.3	31.3	1.6	277	13.6	13.5	-1.6			
27	306	2.9	2.3	-1.7	305	3.5	2.9	-2.0	313	6.4	4.7	-4.4	282	10.8	10.6	-2.3	264	26.1	25.9	2.8	263	32.7	32.4	4.2	265	12.9	12.9	1.1			
28	354	2.7	0.3	-2.7	310	2.5	1.9	-1.6	310	3.3	2.5	-2.1	285	9.1	8.8	-2.4	269	22.2	22.2	0.4	263	30.1	29.9	3.7	261	12.4	12.2	2.0			
29	339	2.8	1.0	-2.6	307	3.0	2.4	-1.8	316	4.3	3.0	-3.1	288	10.9	10.4	-3.4	270	23.4	23.4	0.1	259	30.6	30.1	5.7	248	14.5	13.5	5.4			
30	333	2.5	1.1	-2.2	315	4.2	3.0	-3.0	314	5.2	3.7	-3.6	286	10.6	10.2	-2.9	267	24.5	24.5	1.3	266	31.8	31.7	2.2	268	14.2	14.2	0.5			
31	360	2.8	0.0	-2.8	324	2.7	1.6	-2.2	305	3.7	3.0	-2.1	281	10.8	10.6	-2.0	268	23.5	23.5	0.8	266	30.3	30.2	2.0	267	12.9	12.9	0.6			

Daily Normals of Upper Air Winds (1971-2000)

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LUCKNOW

NOVEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	352	2.8	0.4	-2.8	317	2.5	1.7	-1.8	287	3.8	3.6	-1.1	284	11.4	11.0	-2.8	269	25.5	25.5	0.4	265	31.7	31.6	2.5	264	13.6	13.5	1.3			
2	322	3.6	2.2	-2.8	323	2.6	1.6	-2.1	302	5.1	4.3	-2.7	287	12.9	12.4	-3.7	281	26.4	25.9	-5.2	269	29.9	29.9	0.5	280	17.1	16.9	-2.9			
3	339	2.5	0.9	-2.3	314	2.9	2.1	-2.0	305	5.1	4.2	-2.9	284	13.2	12.8	-3.2	275	26.2	26.1	-2.5	266	34.4	34.3	2.5	275	18.9	18.8	-1.5			
4	324	1.9	1.1	-1.5	303	4.2	3.5	-2.3	302	5.5	4.7	-2.9	292	13.7	12.7	-5.2	278	26.6	26.4	-3.6	269	30.2	30.2	0.5	273	20.6	20.6	-0.9			
5	279	3.3	3.3	-0.5	307	3.8	3.0	-2.3	306	5.4	4.4	-3.2	293	13.3	12.2	-5.3	283	26.2	25.6	-5.8	279	30.7	30.3	-4.7	278	21.0	20.8	-3.0			
6	336	1.0	0.4	-0.9	308	3.6	2.8	-2.2	304	5.8	4.8	-3.2	293	14.0	12.9	-5.4	282	28.1	27.5	-5.6	271	30.1	30.1	-0.5	274	18.2	18.1	-1.4			
7	297	0.9	0.8	-0.4	304	3.6	3.0	-2.0	305	7.2	5.9	-4.2	286	13.4	12.9	-3.6	275	29.0	28.9	-2.6	272	32.9	32.9	-1.2	268	13.9	13.9	0.6			
8	312	2.4	1.8	-1.6	310	4.2	3.2	-2.7	306	8.2	6.6	-4.8	291	13.6	12.7	-4.8	271	27.4	27.4	-0.5	271	32.2	32.2	-0.8	270	20.5	20.5	0.0			
9	288	2.3	2.2	-0.7	310	3.0	2.3	-1.9	303	6.4	5.3	-3.5	286	14.0	13.5	-3.8	279	29.6	29.3	-4.4	274	31.6	31.5	-2.2	259	18.6	18.2	3.7			
10	317	4.8	3.3	-3.5	316	3.7	2.6	-2.7	312	6.6	4.9	-4.4	288	11.5	11.0	-3.5	277	26.9	26.7	-3.5	269	33.1	33.1	0.7	267	19.2	19.2	0.9			
11	317	2.6	1.8	-1.9	318	3.0	2.0	-2.2	310	6.0	4.6	-3.8	289	13.4	12.7	-4.4	278	28.6	28.3	-3.8	269	30.7	30.7	0.6	277	26.0	25.8	-3.2			
12	305	2.4	2.0	-1.4	312	3.8	2.8	-2.5	305	7.0	5.7	-4.0	290	14.6	13.7	-5.0	283	27.1	26.4	-6.2	279	34.4	34.0	-5.2	289	21.9	20.7	-7.0			
13	286	3.5	3.4	-1.0	304	4.6	3.8	-2.6	303	5.9	4.9	-3.2	291	14.6	13.6	-5.2	284	27.2	26.4	-6.6	278	32.2	31.9	-4.4	271	26.4	26.4	-0.3			
14	327	3.0	1.6	-2.5	309	4.3	3.3	-2.7	303	6.9	5.8	-3.8	292	14.0	13.0	-5.3	273	26.3	26.3	-1.4	272	32.5	32.5	-1.1	272	20.7	20.7	-0.8			
15	327	3.5	1.9	-2.9	308	4.6	3.6	-2.8	305	6.7	5.5	-3.8	290	13.5	12.7	-4.5	279	27.4	27.1	-4.3	269	35.4	35.4	0.5	266	20.0	20.0	1.3			
16	324	1.9	1.1	-1.5	317	3.3	2.2	-2.4	310	5.6	4.3	-3.6	283	12.7	12.4	-2.9	270	29.2	29.2	0.0	263	38.5	38.2	4.7	269	19.6	19.6	0.3			
17	317	1.9	1.3	-1.4	308	3.9	3.1	-2.4	302	6.0	5.1	-3.2	277	16.2	16.1	-2.0	265	28.5	28.4	2.5	260	39.8	39.1	7.2	261	22.2	22.0	3.3			
18	307	2.5	2.0	-1.5	302	3.9	3.3	-2.1	295	7.1	6.4	-3.0	276	15.4	15.3	-1.6	265	30.7	30.6	2.6	265	37.5	37.4	3.3	263	20.3	20.1	2.6			
19	290	1.5	1.4	-0.5	311	4.1	3.1	-2.7	295	6.5	5.9	-2.8	280	14.3	14.1	-2.6	267	33.8	33.8	1.8	261	40.6	40.1	6.6	261	23.0	22.7	3.5			
20	315	2.4	1.7	-1.7	309	4.3	3.3	-2.7	295	6.1	5.5	-2.6	279	14.0	13.8	-2.3	265	30.3	30.2	2.8	262	34.7	34.3	5.1	271	24.4	24.4	-0.4			
21	317	2.6	1.8	-1.9	313	4.7	3.4	-3.2	293	5.7	5.3	-2.2	276	14.7	14.6	-1.6	264	32.9	32.7	3.2	262	40.0	39.6	5.6	265	24.7	24.6	2.1			
22	345	1.6	0.4	-1.5	311	3.5	2.6	-2.3	286	5.8	5.6	-1.6	275	14.1	14.0	-1.3	264	28.7	28.6	2.8	262	35.7	35.3	5.0	267	21.4	21.4	1.1			
23	303	3.7	3.1	-2.0	303	3.1	2.6	-1.7	292	7.3	6.8	-2.7	279	17.0	16.8	-2.6	268	33.6	33.6	0.9	266	39.4	39.3	2.7	269	23.8	23.8	0.6			
24	301	4.5	3.9	-2.3	305	4.7	3.8	-2.7	301	6.6	5.7	-3.4	282	16.7	16.3	-3.4	272	30.7	30.7	-0.9	267	36.6	36.6	1.9	268	22.8	22.8	0.8			
25	296	4.6	4.1	-2.0	301	4.2	3.6	-2.2	288	8.0	7.6	-2.4	278	15.5	15.3	-2.2	271	28.0	28.0	-0.6	264	39.7	39.5	3.9	269	27.0	27.0	0.5			
26	292	3.5	3.3	-1.3	313	4.2	3.1	-2.9	291	7.9	7.4	-2.8	281	16.2	15.9	-3.1	272	33.9	33.9	-1.2	269	40.4	40.4	0.5	272	22.9	22.9	-0.6			
27	299	3.5	3.1	-1.7	315	4.8	3.4	-3.4	285	7.4	7.2	-1.9	277	17.2	17.1	-2.0	271	35.7	35.7	-0.7	265	37.5	37.4	3.1	266	31.6	31.5	2.2			
28	304	3.2	2.7	-1.8	305	3.9	3.2	-2.2	287	6.4	6.1	-1.9	283	17.2	16.8	-3.9	270	34.8	34.8	0.0	267	37.4	37.3	2.0	273	25.0	25.0	-1.2			
29	315	3.4	2.4	-2.4	311	4.3	3.2	-2.8	308	7.8	6.2	-4.8	284	16.3	15.8	-4.0	269	34.4	34.4	0.5	264	39.5	39.3	3.8	265	23.0	22.9	2.0			
30	316	3.0	2.1	-2.2	311	4.1	3.1	-2.7	301	6.5	5.6	-3.3	289	15.1	14.3	-4.9	277	32.3	32.0	-4.1	269	40.4	40.4	0.4	278	20.8	20.6	-2.8			

Daily Normals of Upper Air Winds (1971-2000)

216

LUCKNOW

DECEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	304	4.1	3.4	-2.3	319	4.5	3.0	-3.4	301	7.6	6.5	-3.9	285	16.9	16.3	-4.5	278	34.8	34.5	-4.7	267	38.8	38.7	2.1	256	22.9	22.2	5.7			
2	297	3.8	3.4	-1.7	315	4.2	3.0	-3.0	294	8.2	7.5	-3.4	282	16.7	16.4	-3.4	271	34.7	34.7	-0.5	262	40.6	40.2	5.4	268	22.2	22.2	0.6			
3	302	1.5	1.3	-0.8	308	4.4	3.5	-2.7	295	6.8	6.1	-2.9	279	15.4	15.2	-2.5	271	32.1	32.1	-0.7	270	37.9	37.9	0.0	273	25.0	25.0	-1.4			
4	293	2.5	2.3	-1.0	312	5.1	3.8	-3.4	299	8.3	7.3	-4.0	278	15.9	15.8	-2.1	269	32.9	32.9	0.6	270	39.4	39.4	-0.1	266	29.9	29.8	2.1			
5	299	3.5	3.1	-1.7	308	4.6	3.6	-2.8	297	8.9	7.9	-4.0	278	16.5	16.3	-2.4	266	30.7	30.6	1.9	263	38.5	38.2	4.6	261	24.9	24.6	3.9			
6	301	2.1	1.8	-1.1	304	5.0	4.1	-2.8	303	9.5	7.9	-5.2	285	17.0	16.4	-4.4	272	31.3	31.3	-1.2	264	41.3	41.1	4.1	264	25.7	25.6	2.5			
7	300	3.4	2.9	-1.7	310	5.0	3.8	-3.2	304	8.0	6.6	-4.5	282	17.7	17.3	-3.8	273	34.2	34.1	-2.0	266	42.5	42.4	3.2	265	29.6	29.5	2.6			
8	299	3.7	3.2	-1.8	308	5.0	3.9	-3.1	293	8.9	8.2	-3.4	280	18.4	18.1	-3.3	271	32.4	32.4	-0.8	263	40.6	40.3	4.6	266	37.0	36.9	2.3			
9	302	2.5	2.1	-1.3	304	4.6	3.8	-2.6	285	8.3	8.0	-2.1	276	16.9	16.8	-1.9	267	34.3	34.2	2.0	262	40.5	40.1	5.8	266	22.9	22.8	1.6			
10	298	4.2	3.7	-2.0	308	4.9	3.9	-3.0	300	9.0	7.8	-4.5	283	18.2	17.7	-4.2	273	37.1	37.0	-2.1	270	38.6	38.6	0.2	268	30.3	30.3	1.0			
11	291	4.0	3.7	-1.4	304	5.5	4.6	-3.1	294	8.5	7.7	-3.5	280	19.2	18.9	-3.2	274	39.3	39.2	-2.4	270	41.6	41.6	0.2	271	26.8	26.8	-0.4			
12	298	4.3	3.8	-2.0	302	5.4	4.6	-2.9	299	8.3	7.3	-4.0	282	18.2	17.8	-3.9	276	36.5	36.3	-3.5	267	42.7	42.6	2.6	273	28.4	28.4	-1.4			
13	296	5.3	4.8	-2.3	301	6.3	5.4	-3.2	292	10.4	9.6	-3.9	286	21.9	21.1	-5.9	270	38.6	38.6	0.0	272	45.5	45.5	-1.4	273	24.2	24.2	-1.2			
14	299	4.9	4.3	-2.4	305	6.2	5.1	-3.6	297	11.5	10.2	-5.3	284	19.4	18.8	-4.8	273	33.9	33.8	-2.0	268	42.8	42.8	1.5	278	28.8	28.5	-4.0			
15	302	4.5	3.8	-2.4	302	5.2	4.4	-2.7	298	9.4	8.3	-4.5	287	19.0	18.2	-5.6	274	33.9	33.8	-2.3	272	40.4	40.4	-1.7	270	29.2	29.2	0.2			
16	295	4.2	3.8	-1.8	305	6.0	4.9	-3.4	295	9.8	8.9	-4.1	283	18.8	18.3	-4.3	272	37.8	37.8	-1.5	271	41.4	41.4	-0.4	271	28.7	28.7	-0.5			
17	309	3.2	2.5	-2.0	317	5.4	3.7	-3.9	301	9.6	8.2	-5.0	286	18.6	17.9	-5.2	270	34.5	34.5	0.3	270	41.6	41.6	0.3	267	31.9	31.9	1.5			
18	298	3.2	2.8	-1.5	309	5.1	4.0	-3.2	298	9.9	8.8	-4.6	287	17.5	16.8	-5.0	277	37.1	36.8	-4.5	274	40.5	40.4	-2.6	279	26.9	26.6	-4.3			
19	296	3.4	3.1	-1.5	311	4.9	3.7	-3.2	297	9.2	8.2	-4.1	284	18.4	17.9	-4.3	279	37.5	37.1	-5.7	270	39.9	39.9	-0.3	275	28.7	28.6	-2.4			
20	291	2.5	2.3	-0.9	309	4.5	3.5	-2.8	305	7.8	6.4	-4.4	284	18.4	17.9	-4.4	275	40.0	39.8	-3.7	265	41.5	41.4	3.4	272	26.6	26.6	-1.0			
21	307	2.0	1.6	-1.2	303	4.5	3.8	-2.5	304	9.7	8.1	-5.4	283	17.5	17.1	-3.9	273	36.6	36.5	-2.2	266	43.1	43.0	3.3	265	29.5	29.4	2.4			
22	303	2.4	2.0	-1.3	310	5.0	3.8	-3.2	297	9.1	8.1	-4.2	285	20.0	19.3	-5.1	274	35.9	35.8	-2.7	270	41.7	41.7	0.3	276	21.1	21.0	-2.3			
23	317	3.3	2.2	-2.4	298	5.5	4.8	-2.6	294	9.8	8.9	-4.0	283	19.3	18.8	-4.2	275	34.5	34.4	-3.1	268	41.5	41.5	1.3	267	32.1	32.0	1.8			
24	315	0.8	0.6	-0.6	299	4.6	4.0	-2.2	290	8.8	8.3	-3.0	278	18.3	18.1	-2.7	273	36.4	36.4	-1.7	268	41.7	41.7	1.6	274	30.4	30.3	-2.0			
25	317	1.9	1.3	-1.4	299	4.3	3.8	-2.1	284	7.4	7.2	-1.8	278	18.5	18.3	-2.7	276	40.0	39.8	-4.2	274	44.6	44.5	-3.4	268	33.5	33.5	0.9			
26	307	3.4	2.7	-2.0	308	4.1	3.2	-2.5	289	7.8	7.4	-2.6	278	19.5	19.3	-2.8	271	38.1	38.1	-0.5	267	44.2	44.2	2.1	269	34.2	34.2	0.6			
27	302	3.1	2.6	-1.6	299	4.7	4.1	-2.3	283	8.9	8.7	-2.0	275	19.5	19.4	-1.8	270	38.0	38.0	-0.2	264	46.5	46.3	4.7	273	22.9	22.9	-1.3			
28	310	2.5	1.9	-1.6	308	4.1	3.2	-2.5	296	9.2	8.3	-4.0	280	19.7	19.4	-3.3	275	36.5	36.4	-3.0	271	42.5	42.5	-0.7	278	28.6	28.3	-4.0			
29	287	2.4	2.3	-0.7	298	4.2	3.7	-2.0	288	10.1	9.6	-3.1	280	22.3	22.0	-3.9	275	39.1	39.0	-3.4	275	41.9	41.8	-3.3	279	29.1	28.8	-4.5			
30	301	2.7	2.3	-1.4	302	6.2	5.3	-3.3	289	10.7	10.1	-3.5	287	23.2	22.1	-6.9	278	40.0	39.6	-5.4	276	46.8	46.6	-4.6	272	25.9	25.9	-1.0			
31	297	2.9	2.6	-1.3	302	4.5	3.8	-2.4	295	9.8	8.9	-4.2	282	19.2	18.8	-4.1	273	34.3	34.2	-2.0	268	46.7	46.7	1.7	270	30.4	30.4	0.2			

Daily Normals of Upper Air Winds (1971-2000)

MACHILIPATANAM

JANUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	68	5.2	-4.8	-1.9	35	4.4	-2.5	-3.6	25	1.7	-0.7	-1.5	286	5.8	5.6	-1.6	282	15.1	14.8	-3.2	265	20.2	20.1	1.9	263	9.3	9.2	1.2
2	74	5.5	-5.3	-1.5	43	4.1	-2.8	-3.0	332	1.9	0.9	-1.7	298	7.8	6.9	-3.6	275	18.9	18.8	-1.5	268	17.5	17.5	0.7	260	8.2	8.1	1.4
3	67	4.9	-4.5	-1.9	36	5.1	-3.0	-4.1	18	4.0	-1.2	-3.8	286	6.2	6.0	-1.7	282	14.0	13.7	-2.9	271	19.1	19.1	-0.3	239	9.6	8.3	4.9
4	65	3.3	-3.0	-1.4	48	2.8	-2.1	-1.9	16	1.8	-0.5	-1.7	288	4.1	3.9	-1.3	267	13.4	13.4	0.6	257	18.8	18.3	4.3	271	12.7	12.7	-0.3
5	63	4.2	-3.7	-1.9	38	5.2	-3.2	-4.1	5	2.2	-0.2	-2.2	260	5.9	5.8	1.0	266	14.8	14.8	1.0	253	16.1	15.4	4.6	231	7.8	6.1	4.9
6	57	3.1	-2.6	-1.7	43	4.1	-2.8	-3.0	360	1.5	0.0	-1.5	288	6.0	5.7	-1.9	263	16.3	16.2	2.0	250	21.8	20.4	7.6	264	12.5	12.4	1.2
7	82	3.0	-3.0	-0.4	50	3.0	-2.3	-1.9	273	1.9	1.9	-0.1	288	6.2	5.9	-1.9	264	17.0	16.9	1.7	253	18.1	17.3	5.3	281	9.8	9.6	-1.8
8	55	4.2	-3.4	-2.4	46	3.7	-2.7	-2.6	261	0.6	0.6	0.1	266	5.7	5.7	0.4	271	15.5	15.5	-0.2	261	19.4	19.2	2.9	266	8.7	8.7	0.6
9	81	3.9	-3.9	-0.6	63	2.5	-2.2	-1.1	344	0.7	0.2	-0.7	264	6.0	6.0	0.6	265	13.3	13.3	1.1	269	16.1	16.1	0.2	286	7.4	7.1	-2.0
10	93	3.9	-3.9	0.2	74	3.3	-3.2	-0.9	360	1.8	0.0	-1.8	259	7.0	6.9	1.4	270	14.8	14.8	0.1	261	18.0	17.8	2.7	272	6.3	6.3	-0.2
11	98	3.6	-3.6	0.5	103	3.1	-3.0	0.7	270	0.3	0.3	0.0	276	7.6	7.6	-0.8	275	15.0	14.9	-1.3	264	17.0	16.9	1.9	264	12.7	12.6	1.4
12	88	2.6	-2.6	-0.1	59	2.9	-2.5	-1.5	272	2.4	2.4	-0.1	269	5.8	5.8	0.1	280	13.1	12.9	-2.2	270	12.5	12.5	-0.1	291	8.4	7.8	-3.0
13	102	2.5	-2.4	0.5	62	3.6	-3.2	-1.7	318	2.8	1.9	-2.1	274	6.4	6.4	-0.5	273	17.8	17.8	-0.9	267	18.0	18.0	0.9	275	5.9	5.9	-0.5
14	96	2.8	-2.8	0.3	65	3.1	-2.8	-1.3	325	1.6	0.9	-1.3	271	7.0	7.0	-0.1	268	17.5	17.5	0.7	252	18.2	17.3	5.6	222	2.8	1.9	2.1
15	138	2.7	-1.8	2.0	97	2.5	-2.5	0.3	270	2.0	2.0	0.0	274	8.8	8.8	-0.6	267	18.0	18.0	0.8	247	21.3	19.7	8.2	234	3.6	2.9	2.1
16	95	1.1	-1.1	0.1	56	2.2	-1.8	-1.2	277	2.6	2.6	-0.3	279	9.3	9.2	-1.4	277	16.7	16.6	-1.9	268	20.9	20.9	0.9	261	7.2	7.1	1.1
17	102	3.0	-2.9	0.6	55	2.1	-1.7	-1.2	2	2.9	-0.1	-2.9	279	7.6	7.5	-1.2	280	12.3	12.1	-2.2	265	13.3	13.2	1.2	213	7.6	4.1	6.4
18	95	2.2	-2.2	0.2	40	3.3	-2.1	-2.5	333	3.3	1.5	-2.9	285	7.8	7.5	-2.0	267	12.9	12.9	0.7	268	8.0	8.0	0.3	297	3.3	2.9	-1.5
19	112	1.8	-1.7	0.7	43	3.3	-2.2	-2.4	327	3.3	1.8	-2.8	290	7.2	6.8	-2.5	274	12.4	12.4	-0.9	271	9.8	9.8	-0.2	259	7.6	7.5	1.5
20	118	2.4	-2.1	1.1	37	3.6	-2.2	-2.9	351	4.4	0.7	-4.3	300	7.3	6.3	-3.6	268	14.2	14.2	0.5	248	14.7	13.6	5.5	207	4.5	2.0	4.0
21	94	1.6	-1.6	0.1	24	3.5	-1.4	-3.2	349	4.4	0.8	-4.3	296	6.8	6.1	-3.0	265	8.6	8.6	0.7	230	8.9	6.8	5.8	213	3.5	1.9	2.9
22	97	2.5	-2.5	0.3	44	3.6	-2.5	-2.6	352	3.6	0.5	-3.6	292	5.2	4.8	-1.9	270	11.7	11.7	-0.1	235	13.6	11.1	7.8	144	6.2	-3.6	5.0
23	98	2.1	-2.1	0.3	28	3.2	-1.5	-2.8	329	3.5	1.8	-3.0	285	6.0	5.8	-1.6	261	11.5	11.4	1.8	244	11.8	10.6	5.2	161	4.6	-1.5	4.4
24	101	2.1	-2.1	0.4	27	4.7	-2.1	-4.2	2	5.3	-0.2	-5.3	295	4.5	4.1	-1.9	270	8.5	8.5	0.0	234	9.8	7.9	5.8	185	4.8	0.4	4.8
25	62	2.4	-2.1	-1.1	25	4.2	-1.8	-3.8	345	4.1	1.1	-4.0	302	4.9	4.1	-2.6	265	9.4	9.4	0.8	243	12.6	11.2	5.7	263	4.0	4.0	0.5
26	76	2.1	-2.0	-0.5	52	4.3	-3.4	-2.7	8	4.9	-0.7	-4.9	288	4.0	3.8	-1.2	273	10.8	10.8	-0.6	230	13.8	10.6	8.8	243	4.6	4.1	2.1
27	75	2.4	-2.3	-0.6	48	5.5	-4.1	-3.7	33	3.3	-1.8	-2.8	281	4.3	4.2	-0.8	262	9.4	9.3	1.3	234	12.8	10.3	7.6	226	3.2	2.3	2.2
28	79	3.3	-3.2	-0.6	41	4.5	-3.0	-3.4	25	2.6	-1.1	-2.4	297	6.4	5.7	-2.9	264	12.9	12.8	1.4	237	15.8	13.3	8.6	238	3.4	2.9	1.8
29	73	3.8	-3.6	-1.1	52	4.2	-3.3	-2.6	22	2.4	-0.9	-2.2	289	7.4	7.0	-2.4	270	14.4	14.4	0.1	253	17.5	16.7	5.2	260	12.2	12.0	2.2
30	80	2.3	-2.3	-0.4	33	3.3	-1.8	-2.8	325	4.7	2.7	-3.8	294	6.8	6.2	-2.8	271	15.4	15.4	-0.2	245	19.5	17.6	8.3	275	10.7	10.7	-1.0
31	119	3.1	-2.7	1.5	37	3.1	-1.9	-2.5	1	4.5	-0.1	-4.5	301	8.7	7.4	-4.5	273	15.7	15.7	-0.7	254	19.3	18.6	5.2	285	12.5	12.1	-3.2

Daily Normals of Upper Air Winds (1971-2000)

MACHILIPATANAM

FEBRUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	101	3.2	-3.1	0.6	50	3.4	-2.6	-2.2	337	5.0	2.0	-4.6	283	6.7	6.5	-1.5	263	15.7	15.6	1.9	268	23.1	23.1	1.0	267	15.6	15.6	0.9
2	105	3.8	-3.7	1.0	45	2.8	-2.0	-2.0	345	2.8	0.7	-2.7	273	7.9	7.9	-0.4	265	18.1	18.0	1.7	273	25.6	25.6	-1.3	278	16.0	15.8	-2.2
3	93	3.7	-3.7	0.2	37	3.5	-2.1	-2.8	325	3.8	2.2	-3.1	282	8.0	7.8	-1.7	272	20.2	20.2	-0.7	262	20.4	20.2	2.7	262	11.8	11.7	1.6
4	124	3.7	-3.1	2.1	45	2.7	-1.9	-1.9	341	4.3	1.4	-4.1	293	7.8	7.2	-3.1	278	16.4	16.3	-2.2	266	16.0	16.0	1.1	313	5.4	3.9	-3.7
5	118	3.0	-2.6	1.4	23	2.5	-1.0	-2.3	340	3.2	1.1	-3.0	287	7.7	7.3	-2.3	270	17.3	17.3	-0.1	276	16.9	16.8	-1.9	292	5.7	5.3	-2.1
6	108	2.5	-2.4	0.8	73	2.7	-2.6	-0.8	350	2.2	0.4	-2.2	281	8.5	8.3	-1.6	261	17.5	17.3	2.7	269	19.3	19.3	0.5	317	4.1	2.8	-3.0
7	129	3.2	-2.5	2.0	36	1.9	-1.1	-1.5	330	3.6	1.8	-3.1	271	7.0	7.0	-0.1	275	14.7	14.7	-1.2	270	15.6	15.6	0.1	195	2.4	0.6	2.3
8	146	2.7	-1.5	2.2	56	2.5	-2.1	-1.4	276	3.6	3.6	-0.4	286	8.0	7.7	-2.2	265	17.3	17.2	1.6	262	18.2	18.0	2.4	264	5.4	5.4	0.6
9	134	2.8	-2.0	1.9	76	0.8	-0.8	-0.2	278	2.8	2.8	-0.4	278	8.4	8.3	-1.2	263	15.4	15.3	1.9	269	14.9	14.9	0.3	217	0.5	0.3	0.4
10	124	1.8	-1.5	1.0	69	1.4	-1.3	-0.5	323	4.4	2.6	-3.5	284	8.9	8.6	-2.2	271	16.7	16.7	-0.3	260	17.2	17.0	2.9	206	5.8	2.5	5.2
11	120	2.0	-1.7	1.0	59	2.6	-2.2	-1.3	340	2.9	1.0	-2.7	298	6.7	5.9	-3.2	277	15.0	14.9	-1.9	257	25.8	25.1	5.9	219	7.1	4.5	5.5
12	129	3.6	-2.8	2.3	73	2.4	-2.3	-0.7	338	2.7	1.0	-2.5	298	5.0	4.4	-2.3	281	14.8	14.5	-2.8	254	17.5	16.9	4.7	284	7.5	7.3	-1.8
13	108	2.0	-1.9	0.6	62	1.7	-1.5	-0.8	336	1.7	0.7	-1.6	287	4.7	4.5	-1.4	264	15.9	15.8	1.7	254	15.0	14.4	4.2	249	3.6	3.4	1.3
14	126	1.7	-1.4	1.0	128	1.6	-1.3	1.0	345	2.8	0.7	-2.7	280	7.3	7.2	-1.3	270	15.6	15.6	-0.1	238	16.8	14.3	8.8	252	2.2	2.1	0.7
15	118	1.9	-1.7	0.9	56	1.4	-1.2	-0.8	310	5.2	4.0	-3.3	278	8.0	7.9	-1.1	282	16.9	16.5	-3.5	267	13.8	13.8	0.8	247	6.1	5.6	2.4
16	149	2.6	-1.3	2.2	75	1.6	-1.5	-0.4	298	4.9	4.3	-2.3	281	9.0	8.8	-1.7	279	16.2	16.0	-2.6	247	13.4	12.3	5.3	286	3.6	3.5	-1.0
17	150	2.2	-1.1	1.9	158	1.1	-0.4	1.0	291	4.3	4.0	-1.5	282	12.5	12.2	-2.6	276	16.1	16.0	-1.6	239	15.3	13.1	7.9	243	6.7	6.0	3.0
18	184	3.1	0.2	3.1	225	1.3	0.9	0.9	283	5.9	5.8	-1.3	290	11.6	10.9	-4.0	267	15.8	15.8	0.9	258	15.5	15.2	3.2	276	7.8	7.8	-0.8
19	138	2.8	-1.9	2.1	165	1.1	-0.3	1.1	303	5.7	4.8	-3.1	289	10.6	10.0	-3.5	279	16.0	15.8	-2.4	263	14.8	14.7	1.9	274	10.8	10.8	-0.8
20	176	4.3	-0.3	4.3	217	0.5	0.3	0.4	293	6.6	6.1	-2.6	291	11.0	10.3	-3.9	276	16.1	16.0	-1.7	252	13.0	12.3	4.1	261	6.1	6.0	0.9
21	182	3.3	0.1	3.3	234	0.9	0.7	0.5	309	4.9	3.8	-3.1	285	10.0	9.7	-2.6	277	19.2	19.1	-2.3	257	15.6	15.2	3.4	268	8.1	8.1	0.3
22	193	3.7	0.8	3.6	217	0.5	0.3	0.4	299	4.9	4.3	-2.4	287	10.5	10.0	-3.1	276	14.9	14.8	-1.6	267	16.1	16.1	0.8	286	9.4	9.0	-2.6
23	133	2.6	-1.9	1.8	113	0.8	-0.7	0.3	307	3.1	2.5	-1.9	285	9.1	8.8	-2.3	280	15.6	15.4	-2.6	267	15.3	15.3	0.8	262	6.4	6.3	0.9
24	117	2.8	-2.5	1.3	106	1.9	-1.8	0.5	7	3.1	-0.4	-3.1	286	7.2	6.9	-2.0	274	14.5	14.5	-1.0	258	14.4	14.1	3.0	243	4.2	3.8	1.9
25	118	3.0	-2.6	1.4	79	1.0	-1.0	-0.2	2	3.4	-0.1	-3.4	287	8.3	7.9	-2.4	276	16.5	16.4	-1.7	264	17.9	17.8	2.0	280	6.4	6.3	-1.1
26	139	2.8	-1.8	2.1	126	1.4	-1.1	0.8	352	3.7	0.5	-3.7	272	10.5	10.5	-0.3	274	19.1	19.1	-1.2	266	16.0	16.0	1.2	257	5.3	5.2	1.2
27	136	3.6	-2.5	2.6	93	1.7	-1.7	0.1	19	3.9	-1.3	-3.7	272	9.2	9.2	-0.4	260	20.1	19.8	3.4	264	14.6	14.5	1.4	272	2.8	2.8	-0.1
28	130	2.3	-1.8	1.5	86	1.4	-1.4	-0.1	348	3.3	0.7	-3.2	290	7.9	7.4	-2.7	272	16.5	16.5	-0.5	274	15.8	15.8	-1.0	263	6.3	6.2	0.8
29	120	3.4	-3.0	1.7	75	3.5	-3.4	-0.9	42	4.0	-2.7	-3.0	295	9.7	8.8	-4.1	258	12.6	12.3	2.7	252	18.2	17.4	5.5	243	6.5	5.8	3.0

Daily Normals of Upper Air Winds (1971-2000)

219

MACHILIPATANAM

MARCH

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	152	2.1	-1.0	1.9	126	1.4	-1.1	0.8	24	3.0	-1.2	-2.7	285	8.3	8.0	-2.1	272	16.9	16.9	-0.5	259	14.0	13.8	2.6	251	5.8	5.5	1.9			
2	132	2.4	-1.8	1.6	87	1.7	-1.7	-0.1	4	4.0	-0.3	-4.0	275	8.6	8.6	-0.8	276	15.6	15.5	-1.5	255	18.3	17.7	4.8	253	10.0	9.6	2.9			
3	136	3.2	-2.2	2.3	99	1.9	-1.9	0.3	6	5.0	-0.5	-5.0	284	7.5	7.3	-1.8	265	15.1	15.0	1.4	254	21.2	20.3	6.0	261	8.7	8.6	1.3			
4	144	3.2	-1.9	2.6	28	1.9	-0.9	-1.7	354	4.9	0.5	-4.9	274	5.3	5.3	-0.4	262	11.7	11.6	1.7	247	15.0	13.8	5.9	250	3.8	3.6	1.3			
5	155	2.9	-1.2	2.6	95	2.1	-2.1	0.2	4	4.1	-0.3	-4.1	289	8.7	8.2	-2.8	266	12.5	12.5	0.8	250	18.2	17.1	6.2	270	11.1	11.1	0.0			
6	163	4.1	-1.2	3.9	111	1.7	-1.6	0.6	17	3.9	-1.1	-3.7	282	7.7	7.5	-1.6	262	15.1	14.9	2.2	256	16.7	16.2	4.1	256	8.4	8.2	2.0			
7	167	1.3	-0.3	1.3	76	2.1	-2.0	-0.5	18	4.4	-1.4	-4.2	297	6.4	5.7	-2.9	276	15.3	15.2	-1.5	262	15.6	15.5	2.1	263	11.1	11.0	1.4			
8	183	4.4	0.2	4.4	98	2.2	-2.2	0.3	16	3.7	-1.0	-3.6	289	6.2	5.9	-2.0	268	14.2	14.2	0.6	264	14.8	14.7	1.6	256	6.1	5.9	1.5			
9	178	2.5	-0.1	2.5	92	2.3	-2.3	0.1	27	3.7	-1.7	-3.3	272	6.9	6.9	-0.2	264	17.1	17.0	1.7	249	18.6	17.3	6.8	266	8.6	8.6	0.6			
10	153	3.1	-1.4	2.8	112	2.2	-2.0	0.8	22	2.4	-0.9	-2.2	278	7.5	7.4	-1.0	270	16.7	16.7	0.1	257	20.4	19.8	4.7	310	7.0	5.3	-4.5			
11	184	3.9	0.3	3.9	127	0.5	-0.4	0.3	351	3.6	0.6	-3.6	268	9.3	9.3	0.4	274	17.7	17.7	-1.1	267	19.2	19.2	1.1	252	4.6	4.4	1.4			
12	196	4.7	1.3	4.5	349	0.5	0.1	-0.5	3	4.4	-0.2	-4.4	289	9.7	9.2	-3.2	275	18.9	18.8	-1.5	268	19.5	19.5	0.8	266	9.7	9.7	0.7			
13	195	4.6	1.2	4.4	180	1.3	0.0	1.3	343	4.4	1.3	-4.2	293	9.0	8.3	-3.5	279	17.2	17.0	-2.6	266	21.0	20.9	1.6	264	14.8	14.7	1.6			
14	173	4.2	-0.5	4.2	145	1.9	-1.1	1.6	353	3.2	0.4	-3.2	304	7.5	6.2	-4.2	272	17.0	17.0	-0.5	266	21.4	21.3	1.6	268	15.8	15.8	0.5			
15	181	4.0	0.1	4.0	143	2.0	-1.2	1.6	15	4.7	-1.2	-4.5	295	6.2	5.6	-2.6	282	16.8	16.4	-3.6	271	18.0	18.0	-0.3	270	6.9	6.9	0.0			
16	172	2.1	-0.3	2.1	125	1.2	-1.0	0.7	21	3.4	-1.2	-3.2	303	6.7	5.6	-3.7	280	14.0	13.8	-2.4	260	23.6	23.3	3.9	275	11.0	11.0	-1.0			
17	182	3.6	0.1	3.6	122	2.2	-1.9	1.2	15	4.1	-1.1	-4.0	307	4.6	3.7	-2.8	264	13.3	13.2	1.4	248	18.3	16.9	6.9	267	11.5	11.5	0.7			
18	182	2.8	0.1	2.8	183	2.1	0.1	2.1	8	3.6	-0.5	-3.6	287	6.1	5.8	-1.8	257	13.0	12.7	2.9	259	19.3	18.9	3.8	262	8.3	8.2	1.1			
19	189	3.7	0.6	3.7	176	1.4	-0.1	1.4	360	4.5	0.0	-4.5	295	6.7	6.1	-2.8	262	12.9	12.8	1.7	263	14.8	14.7	1.7	263	12.2	12.1	1.4			
20	188	3.4	0.5	3.4	157	2.3	-0.9	2.1	9	4.4	-0.7	-4.3	313	7.1	5.2	-4.8	272	15.2	15.2	-0.6	253	19.0	18.2	5.4	278	8.3	8.2	-1.1			
21	178	3.6	-0.1	3.6	180	1.4	0.0	1.4	6	4.8	-0.5	-4.8	303	5.4	4.5	-2.9	280	13.3	13.1	-2.3	274	15.5	15.5	-1.0	270	6.8	6.8	0.0			
22	185	4.3	0.4	4.3	236	0.4	0.3	0.2	30	4.2	-2.1	-3.6	304	5.9	4.9	-3.3	274	12.9	12.9	-1.0	270	13.9	13.9	0.1	258	2.5	2.4	0.5			
23	202	4.1	1.5	3.8	187	1.7	0.2	1.7	4	3.9	-0.3	-3.9	312	5.1	3.8	-3.4	263	13.4	13.3	1.6	267	17.5	17.5	0.8	249	7.1	6.6	2.5			
24	177	4.3	-0.2	4.3	135	0.6	-0.4	0.4	14	2.1	-0.5	-2.0	292	5.2	4.8	-1.9	265	13.2	13.2	1.1	261	20.4	20.1	3.3	271	7.6	7.6	-0.1			
25	167	5.1	-1.2	5.0	122	1.3	-1.1	0.7	341	2.8	0.9	-2.6	278	5.9	5.8	-0.8	268	15.8	15.8	0.5	266	18.7	18.6	1.4	289	2.1	2.0	-0.7			
26	169	3.1	-0.6	3.0	135	0.4	-0.3	0.3	351	3.1	0.5	-3.1	297	5.1	4.6	-2.3	270	14.5	14.5	0.1	273	15.4	15.4	-0.8	305	4.9	4.0	-2.8			
27	165	2.4	-0.6	2.3	351	0.6	0.1	-0.6	344	3.7	1.0	-3.6	320	5.4	3.5	-4.1	291	13.1	12.3	-4.6	282	14.5	14.2	-2.9	277	3.2	3.2	-0.4			
28	163	2.7	-0.8	2.6	45	0.8	-0.6	-0.6	22	3.2	-1.2	-3.0	308	4.2	3.3	-2.6	269	10.8	10.8	0.1	262	12.8	12.7	1.8	58	1.9	-1.6	-1.0			
29	182	3.7	0.1	3.7	108	0.3	-0.3	0.1	26	3.9	-1.7	-3.5	332	4.3	2.0	-3.8	271	8.9	8.9	-0.1	248	13.0	12.0	4.9	230	5.9	4.5	3.8			
30	190	4.2	0.7	4.1	252	0.6	0.6	0.2	15	3.9	-1.0	-3.8	308	3.6	2.8	-2.2	258	10.6	10.4	2.2	257	13.9	13.5	3.1	268	4.6	4.6	0.2			
31	174	3.1	-0.3	3.1	180	1.4	0.0	1.4	35	3.9	-2.2	-3.2	318	4.5	3.0	-3.3	261	11.1	11.0	1.7	255	14.3	13.8	3.6	277	10.7	10.6	-1.3			

Daily Normals of Upper Air Winds (1971-2000)

220

MACHILIPATANAM

APRIL

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	160	4.7	-1.6	4.4	104	2.1	-2.0	0.5	58	3.1	-2.6	-1.6	337	2.5	1.0	-2.3	261	10.0	9.9	1.6	257	14.2	13.8	3.3	280	7.7	7.6	-1.4			
2	172	4.9	-0.7	4.8	133	2.6	-1.9	1.8	33	4.2	-2.3	-3.5	285	4.8	4.6	-1.2	264	12.3	12.2	1.2	249	14.2	13.2	5.1	283	3.5	3.4	-0.8			
3	173	4.0	-0.5	4.0	135	2.8	-2.0	2.0	53	5.3	-4.2	-3.2	265	3.6	3.6	0.3	271	12.7	12.7	-0.2	241	13.9	12.2	6.7	335	3.1	1.3	-2.8			
4	169	4.2	-0.8	4.1	131	3.0	-2.3	2.0	50	5.0	-3.8	-3.2	264	4.0	4.0	0.4	261	15.5	15.3	2.4	254	17.5	16.8	4.9	272	3.5	3.5	-0.1			
5	155	3.8	-1.6	3.4	133	2.5	-1.8	1.7	42	5.0	-3.3	-3.7	279	4.5	4.4	-0.7	271	14.5	14.5	-0.2	248	14.0	13.0	5.3	288	5.5	5.2	-1.7			
6	165	2.7	-0.7	2.6	143	0.5	-0.3	0.4	42	4.3	-2.9	-3.2	301	4.2	3.6	-2.2	281	13.7	13.5	-2.6	279	14.1	13.9	-2.1	237	3.8	3.2	2.1			
7	243	2.2	2.0	1.0	75	1.1	-1.1	-0.3	14	5.0	-1.2	-4.9	326	3.6	2.0	-3.0	299	10.7	9.3	-5.2	278	11.4	11.3	-1.6	258	4.2	4.1	0.9			
8	196	3.7	1.0	3.6	180	0.5	0.0	0.5	29	4.1	-2.0	-3.6	296	4.8	4.3	-2.1	274	10.2	10.2	-0.7	272	10.8	10.8	-0.3	281	3.8	3.7	-0.7			
9	193	4.1	0.9	4.0	215	2.4	1.4	2.0	43	2.1	-1.4	-1.5	288	4.7	4.5	-1.5	269	9.6	9.6	0.2	258	10.8	10.6	2.3	241	5.0	4.4	2.4			
10	197	3.4	1.0	3.2	225	0.8	0.6	0.6	22	3.1	-1.2	-2.9	320	3.5	2.3	-2.7	285	11.3	10.9	-2.9	258	13.9	13.6	2.9	266	4.9	4.9	0.3			
11	200	3.7	1.3	3.5	225	1.6	1.1	1.1	45	3.5	-2.5	-2.5	302	2.5	2.1	-1.3	279	11.0	10.9	-1.8	257	15.3	14.9	3.4	190	2.8	0.5	2.8			
12	197	4.1	1.2	3.9	203	1.3	0.5	1.2	20	4.4	-1.5	-4.1	321	3.5	2.2	-2.7	268	6.9	6.9	0.3	242	11.3	10.0	5.3	207	5.1	2.3	4.5			
13	193	3.6	0.8	3.5	194	0.8	0.2	0.8	21	2.6	-0.9	-2.4	307	5.4	4.3	-3.2	266	8.9	8.9	0.7	241	12.3	10.8	5.9	269	5.2	5.2	0.1			
14	171	3.3	-0.5	3.3	167	1.8	-0.4	1.8	52	5.0	-3.9	-3.1	288	4.2	4.0	-1.3	246	9.8	9.0	4.0	251	17.0	16.1	5.4	245	6.5	5.9	2.7			
15	163	4.2	-1.2	4.0	172	2.1	-0.3	2.1	57	3.8	-3.2	-2.1	288	2.2	2.1	-0.7	251	14.3	13.5	4.6	250	18.8	17.7	6.3	239	6.9	5.9	3.5			
16	188	3.5	0.5	3.5	165	1.1	-0.3	1.1	60	3.4	-3.0	-1.7	283	4.6	4.5	-1.0	259	14.4	14.1	2.8	244	21.2	19.1	9.2	261	7.4	7.3	1.2			
17	197	2.7	0.8	2.6	90	0.8	-0.8	0.0	43	4.7	-3.2	-3.4	290	2.9	2.7	-1.0	246	13.7	12.6	5.5	241	17.6	15.4	8.5	247	7.8	7.2	3.0			
18	180	3.4	0.0	3.4	162	0.3	-0.1	0.3	46	5.2	-3.7	-3.6	287	3.1	3.0	-0.9	239	15.6	13.4	8.0	241	21.6	18.9	10.5	174	2.9	-0.3	2.9			
19	192	3.4	0.7	3.3	284	1.2	1.2	-0.3	43	5.4	-3.7	-3.9	297	3.0	2.7	-1.4	243	11.4	10.2	5.1	232	16.4	12.9	10.1	235	6.3	5.2	3.6			
20	173	3.1	-0.4	3.1	135	0.6	-0.4	0.4	35	4.0	-2.3	-3.3	310	3.0	2.3	-1.9	251	14.7	13.9	4.7	242	20.0	17.6	9.4	224	3.6	2.5	2.6			
21	175	3.5	-0.3	3.5	144	0.9	-0.5	0.7	39	4.1	-2.6	-3.2	299	5.0	4.4	-2.4	265	13.6	13.5	1.2	253	21.2	20.2	6.3	273	10.5	10.5	-0.6			
22	180	3.9	0.0	3.9	279	0.6	0.6	-0.1	32	4.7	-2.5	-4.0	279	4.3	4.2	-0.7	270	13.2	13.2	-0.1	251	16.7	15.8	5.3	220	3.1	2.0	2.4			
23	205	3.8	1.6	3.5	6	0.9	-0.1	-0.9	34	4.2	-2.4	-3.5	283	5.7	5.5	-1.3	263	12.1	12.0	1.4	271	14.0	14.0	-0.3	216	2.7	1.6	2.2			
24	199	3.9	1.3	3.7	283	1.3	1.3	-0.3	45	3.8	-2.7	-2.7	288	4.6	4.4	-1.4	268	11.6	11.6	0.5	273	16.5	16.5	-0.9	13	1.3	-0.3	-1.3			
25	215	2.8	1.6	2.3	219	0.6	0.4	0.5	36	3.2	-1.9	-2.6	319	6.4	4.2	-4.8	271	12.8	12.8	-0.3	252	12.7	12.1	3.9	312	4.2	3.1	-2.8			
26	216	4.2	2.5	3.4	315	1.7	1.2	-1.2	58	5.2	-4.4	-2.7	315	5.1	3.6	-3.6	277	11.6	11.5	-1.4	257	16.8	16.4	3.8	322	4.7	2.9	-3.7			
27	194	3.4	0.8	3.3	347	1.3	0.3	-1.3	27	4.8	-2.2	-4.3	325	5.4	3.1	-4.4	267	11.8	11.8	0.7	241	11.5	10.1	5.6	41	2.0	-1.3	-1.5			
28	191	2.6	0.5	2.6	325	1.2	0.7	-1.0	19	4.2	-1.4	-4.0	312	6.2	4.6	-4.1	272	12.0	12.0	-0.5	258	15.4	15.1	3.1	77	3.9	-3.8	-0.9			
29	213	3.5	1.9	2.9	310	2.3	1.8	-1.5	13	4.1	-0.9	-4.0	320	5.6	3.6	-4.3	275	11.1	11.1	-0.9	256	12.4	12.0	3.0	88	2.4	-2.4	-0.1			
30	198	2.0	0.6	1.9	283	1.7	1.7	-0.4	346	3.6	0.9	-3.5	329	5.1	2.6	-4.4	278	9.1	9.0	-1.2	242	11.4	10.0	5.4	132	4.0	-3.0	2.7			

Daily Normals of Upper Air Winds (1971-2000)

MACHILIPATANAM

MAY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	186	3.0	0.3	3.0	309	2.2	1.7	-1.4	17	3.8	-1.1	-3.6	320	4.7	3.0	-3.6	267	8.7	8.7	0.4	253	9.6	9.2	2.9	68	2.9	-2.7	-1.1
2	180	1.5	0.0	1.5	331	2.6	1.3	-2.3	31	2.6	-1.3	-2.2	309	4.4	3.4	-2.8	278	9.1	9.0	-1.2	245	12.8	11.6	5.5	144	4.2	-2.5	3.4
3	183	3.8	0.2	3.8	4	1.6	-0.1	-1.6	36	3.2	-1.9	-2.6	288	1.6	1.5	-0.5	265	6.7	6.7	0.6	247	8.3	7.7	3.2	145	6.4	-3.7	5.2
4	189	3.3	0.5	3.3	354	1.0	0.1	-1.0	39	3.2	-2.0	-2.5	31	1.2	-0.6	-1.0	275	5.7	5.7	-0.5	269	8.9	8.9	0.2	140	3.1	-2.0	2.4
5	169	3.3	-0.6	3.2	319	2.8	1.8	-2.1	27	4.6	-2.1	-4.1	331	3.1	1.5	-2.7	248	7.4	6.9	2.8	244	7.6	6.9	3.3	99	4.4	-4.3	0.7
6	173	3.3	-0.4	3.3	349	1.0	0.2	-1.0	45	4.2	-3.0	-3.0	297	3.1	2.8	-1.4	273	6.7	6.7	-0.4	254	9.9	9.5	2.8	114	4.3	-3.9	1.7
7	176	2.9	-0.2	2.9	338	2.2	0.8	-2.0	41	4.3	-2.8	-3.2	319	2.9	1.9	-2.2	284	5.5	5.3	-1.3	239	5.6	4.8	2.9	107	6.2	-5.9	1.8
8	191	2.1	0.4	2.1	355	2.2	0.2	-2.2	23	4.6	-1.8	-4.2	337	3.4	1.3	-3.1	266	5.5	5.5	0.4	254	3.7	3.6	1.0	121	6.4	-5.5	3.3
9	242	3.0	2.6	1.4	290	3.2	3.0	-1.1	360	3.1	0.0	-3.1	348	3.0	0.6	-2.9	285	4.3	4.2	-1.1	216	7.1	4.2	5.7	104	5.5	-5.3	1.3
10	183	2.2	0.1	2.2	312	2.5	1.9	-1.7	351	4.5	0.7	-4.4	320	4.2	2.7	-3.2	270	4.7	4.7	0.0	236	6.9	5.7	3.8	101	4.8	-4.7	0.9
11	112	1.6	-1.5	0.6	279	1.3	1.3	-0.2	2	3.4	-0.1	-3.4	328	3.4	1.8	-2.9	263	4.9	4.9	0.6	224	8.5	5.9	6.1	99	5.4	-5.3	0.8
12	166	0.4	-0.1	0.4	357	2.0	0.1	-2.0	352	4.1	0.6	-4.1	342	5.2	1.6	-5.0	248	6.4	5.9	2.4	230	10.6	8.1	6.9	117	6.1	-5.4	2.8
13	221	1.8	1.2	1.4	299	2.3	2.0	-1.1	17	4.4	-1.3	-4.2	334	7.2	3.2	-6.5	269	5.2	5.2	0.1	221	3.0	2.0	2.3	105	10.3	-10.0	2.6
14	226	2.8	2.0	1.9	273	2.2	2.2	-0.1	345	4.9	1.3	-4.7	354	3.6	0.4	-3.6	276	3.8	3.8	-0.4	232	3.1	2.4	1.9	99	10.4	-10.3	1.6
15	232	4.1	3.2	2.5	297	3.8	3.4	-1.7	14	4.6	-1.1	-4.5	350	3.6	0.6	-3.5	284	3.6	3.5	-0.9	171	2.6	-0.4	2.6	100	10.5	-10.3	1.8
16	261	0.6	0.6	0.1	320	2.6	1.7	-2.0	16	4.8	-1.3	-4.6	5	3.8	-0.3	-3.8	229	2.3	1.7	1.5	182	3.1	0.1	3.1	104	13.1	-12.7	3.2
17	204	2.4	1.0	2.2	320	3.4	2.2	-2.6	23	5.9	-2.3	-5.4	345	5.6	1.4	-5.4	283	4.7	4.6	-1.1	231	4.1	3.2	2.6	107	6.6	-6.3	1.9
18	261	2.5	2.5	0.4	314	5.0	3.6	-3.5	354	6.4	0.7	-6.4	328	4.9	2.6	-4.2	284	4.5	4.4	-1.1	187	4.1	0.5	4.1	110	11.3	-10.6	3.9
19	252	3.5	3.3	1.1	309	5.0	3.9	-3.2	359	6.4	0.1	-6.4	340	4.1	1.4	-3.9	261	3.9	3.9	0.6	195	6.1	1.6	5.9	107	10.8	-10.3	3.2
20	259	3.6	3.5	0.7	314	6.0	4.3	-4.2	1	5.5	-0.1	-5.5	340	2.9	1.0	-2.7	260	4.8	4.7	0.8	220	4.7	3.0	3.6	117	10.5	-9.4	4.7
21	274	2.6	2.6	-0.2	311	5.3	4.0	-3.5	7	3.1	-0.4	-3.1	319	4.0	2.6	-3.0	255	2.3	2.2	0.6	164	5.4	-1.5	5.2	97	11.7	-11.6	1.5
22	256	3.7	3.6	0.9	304	4.0	3.3	-2.2	1	4.0	-0.1	-4.0	327	4.0	2.2	-3.4	311	0.9	0.7	-0.6	152	7.3	-3.4	6.5	92	14.8	-14.8	0.4
23	265	3.4	3.4	0.3	309	4.3	3.3	-2.7	13	4.6	-1.0	-4.5	331	4.5	2.2	-3.9	338	0.5	0.2	-0.5	153	5.1	-2.3	4.5	96	12.5	-12.4	1.3
24	248	3.2	3.0	1.2	297	4.8	4.3	-2.2	355	4.2	0.4	-4.2	341	3.4	1.1	-3.2	315	1.3	0.9	-0.9	177	4.2	-0.2	4.2	97	12.4	-12.3	1.5
25	225	2.5	1.8	1.8	307	5.9	4.7	-3.6	1	3.9	-0.1	-3.9	349	4.4	0.8	-4.3	277	1.6	1.6	-0.2	37	0.5	-0.3	-0.4	103	10.4	-10.1	2.4
26	220	2.3	1.5	1.8	311	3.5	2.6	-2.3	4	4.1	-0.3	-4.1	351	3.0	0.5	-3.0	336	1.2	0.5	-1.1	147	3.0	-1.6	2.5	99	13.1	-12.9	2.0
27	238	3.1	2.6	1.6	310	4.3	3.3	-2.8	352	2.7	0.4	-2.7	327	1.7	0.9	-1.4	153	2.2	-1.0	2.0	107	2.7	-2.6	0.8	135	6.2	-4.4	4.4
28	255	4.3	4.2	1.1	309	4.8	3.7	-3.0	353	3.4	0.4	-3.4	358	2.4	0.1	-2.4	172	2.1	-0.3	2.1	130	5.7	-4.4	3.7	99	15.7	-15.5	2.5
29	274	4.0	4.0	-0.3	311	4.8	3.6	-3.1	3	4.5	-0.2	-4.5	20	3.0	-1.0	-2.8	210	1.4	0.7	1.2	116	5.2	-4.7	2.3	100	14.1	-13.9	2.5
30	277	4.3	4.3	-0.5	313	5.3	3.9	-3.6	14	3.2	-0.8	-3.1	23	3.4	-1.3	-3.1	135	0.1	-0.1	0.1	143	6.8	-4.1	5.4	110	15.6	-14.7	5.3
31	284	3.2	3.1	-0.8	315	3.4	2.4	-2.4	342	3.3	1.0	-3.1	42	4.0	-2.7	-3.0	153	0.9	-0.4	0.8	129	6.8	-5.3	4.3	106	9.3	-8.9	2.6

Daily Normals of Upper Air Winds (1971-2000)

222

MACHILIPATANAM

JUNE

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	254	1.5	1.4	0.4	299	4.1	3.6	-2.0	356	4.3	0.3	-4.3	21	2.2	-0.8	-2.1	132	1.2	-0.9	0.8	143	8.1	-4.9	6.4	104	13.3	-12.9	3.2			
2	335	1.4	0.6	-1.3	312	4.6	3.4	-3.1	359	4.1	0.1	-4.1	340	1.5	0.5	-1.4	112	2.4	-2.2	0.9	122	7.1	-6.0	3.8	95	21.4	-21.3	1.9			
3	255	3.0	2.9	0.8	310	4.5	3.5	-2.9	360	4.3	0.0	-4.3	31	0.6	-0.3	-0.5	116	3.4	-3.1	1.5	117	7.2	-6.4	3.3	103	16.9	-16.5	3.7			
4	197	3.9	1.1	3.7	315	3.3	2.3	-2.3	9	4.7	-0.7	-4.6	53	2.1	-1.7	-1.3	82	2.9	-2.9	-0.4	118	5.9	-5.2	2.8	103	16.9	-16.5	3.7			
5	180	1.9	0.0	1.9	317	3.4	2.3	-2.5	39	2.1	-1.3	-1.6	66	2.2	-2.0	-0.9	87	3.8	-3.8	-0.2	99	7.4	-7.3	1.1	93	16.3	-16.3	0.9			
6	220	3.5	2.3	2.7	271	5.1	5.1	-0.1	336	2.0	0.8	-1.8	282	1.9	1.9	-0.4	97	2.6	-2.6	0.3	100	9.7	-9.6	1.7	89	17.3	-17.3	-0.2			
7	280	2.3	2.3	-0.4	287	5.7	5.4	-1.7	345	2.0	0.5	-1.9	282	1.4	1.4	-0.3	86	3.1	-3.1	-0.2	95	11.0	-11.0	0.9	90	16.7	-16.7	-0.1			
8	104	0.8	-0.8	0.2	304	4.7	3.9	-2.6	293	2.5	2.3	-1.0	360	2.6	0.0	-2.6	81	5.2	-5.1	-0.8	88	14.0	-14.0	-0.4	92	19.8	-19.8	0.6			
9	315	0.8	0.6	-0.6	292	6.8	6.3	-2.5	282	4.9	4.8	-1.0	39	1.4	-0.9	-1.1	44	3.5	-2.4	-2.5	77	10.4	-10.1	-2.4	84	22.0	-21.9	-2.3			
10	227	2.6	1.9	1.8	294	6.0	5.5	-2.5	318	4.6	3.1	-3.4	289	2.8	2.6	-0.9	72	0.9	-0.9	-0.3	102	9.2	-9.0	1.9	86	21.8	-21.8	-1.4			
11	271	4.6	4.6	-0.1	290	7.7	7.2	-2.6	301	4.4	3.8	-2.3	295	5.4	4.9	-2.3	65	3.3	-3.0	-1.4	87	10.5	-10.5	-0.6	87	21.0	-21.0	-1.1			
12	235	5.2	4.3	3.0	290	8.5	8.0	-2.9	296	6.6	5.9	-2.9	303	5.0	4.2	-2.7	28	3.2	-1.5	-2.8	78	10.3	-10.1	-2.1	91	28.2	-28.2	0.4			
13	324	0.9	0.5	-0.7	309	4.8	3.7	-3.0	320	5.3	3.4	-4.1	286	4.8	4.6	-1.3	85	4.5	-4.5	-0.4	87	12.5	-12.5	-0.6	88	24.9	-24.9	-0.7			
14	276	3.9	3.9	-0.4	295	6.5	5.9	-2.8	296	7.0	6.3	-3.1	286	1.9	1.8	-0.5	95	5.2	-5.2	0.5	78	13.8	-13.5	-2.8	94	23.5	-23.5	1.5			
15	250	7.7	7.3	2.6	278	8.2	8.1	-1.1	274	6.4	6.4	-0.4	269	6.3	6.3	0.1	95	5.2	-5.2	0.5	83	16.2	-16.1	-2.0	90	27.1	-27.1	-0.2			
16	252	7.1	6.7	2.2	282	8.9	8.7	-1.8	281	9.9	9.7	-1.9	280	6.1	6.0	-1.1	60	4.4	-3.8	-2.2	85	15.8	-15.7	-1.4	93	26.7	-26.7	1.3			
17	248	8.1	7.5	3.1	273	10.2	10.2	-0.6	277	12.1	12.0	-1.4	279	8.0	7.9	-1.3	47	1.6	-1.2	-1.1	75	10.5	-10.1	-2.7	89	26.8	-26.8	-0.6			
18	249	8.5	7.9	3.1	271	12.2	12.2	-0.3	281	13.6	13.4	-2.5	280	8.9	8.8	-1.5	77	3.7	-3.6	-0.8	85	13.2	-13.2	-1.1	86	24.0	-24.0	-1.5			
19	251	8.7	8.2	2.8	278	10.5	10.4	-1.4	277	10.6	10.5	-1.2	278	7.6	7.5	-1.0	63	4.8	-4.3	-2.2	87	14.0	-14.0	-0.7	87	29.3	-29.3	-1.4			
20	270	7.1	7.1	0.0	286	9.8	9.4	-2.7	287	10.7	10.2	-3.1	282	6.0	5.9	-1.3	77	4.5	-4.4	-1.0	87	15.8	-15.8	-0.7	95	30.1	-30.0	2.4			
21	266	9.0	9.0	0.7	290	10.0	9.4	-3.5	289	9.2	8.7	-3.0	297	6.7	6.0	-3.0	74	6.6	-6.4	-1.8	78	14.5	-14.2	-2.9	89	23.6	-23.6	-0.5			
22	277	8.4	8.3	-1.0	287	9.1	8.7	-2.7	285	9.8	9.5	-2.6	284	6.8	6.6	-1.7	82	6.0	-5.9	-0.8	86	16.4	-16.4	-1.1	94	29.7	-29.6	2.1			
23	264	6.7	6.7	0.7	281	8.8	8.6	-1.7	288	11.2	10.7	-3.4	290	6.6	6.2	-2.3	82	5.9	-5.8	-0.8	91	18.8	-18.8	0.2	87	29.3	-29.3	-1.3			
24	275	7.5	7.5	-0.6	289	9.3	8.8	-3.0	287	8.2	7.8	-2.4	285	7.3	7.1	-1.9	51	4.4	-3.4	-2.8	85	13.8	-13.7	-1.3	88	30.2	-30.2	-0.8			
25	281	7.8	7.7	-1.5	283	10.6	10.3	-2.3	283	9.2	9.0	-2.1	287	5.9	5.6	-1.7	79	6.1	-6.0	-1.2	88	16.4	-16.4	-0.5	91	33.0	-33.0	0.8			
26	265	6.9	6.9	0.6	282	7.3	7.1	-1.5	283	9.0	8.8	-2.1	280	5.8	5.7	-1.0	74	4.7	-4.5	-1.3	83	16.5	-16.4	-1.9	91	26.4	-26.4	0.6			
27	264	7.2	7.2	0.7	279	8.4	8.3	-1.3	280	10.6	10.4	-1.9	284	6.0	5.8	-1.4	45	5.2	-3.7	-3.7	79	14.9	-14.6	-2.9	86	31.4	-31.3	-2.2			
28	257	5.1	5.0	1.2	284	9.6	9.3	-2.3	280	12.1	11.9	-2.2	283	3.7	3.6	-0.8	92	8.3	-8.3	0.3	87	19.5	-19.5	-1.0	86	28.7	-28.6	-2.1			
29	243	7.2	6.4	3.2	282	9.2	9.0	-1.9	280	8.9	8.8	-1.5	289	4.0	3.8	-1.3	79	6.0	-5.9	-1.2	88	18.4	-18.4	-0.5	85	34.1	-33.9	-3.2			
30	263	7.8	7.7	0.9	273	9.1	9.1	-0.5	283	7.8	7.6	-1.7	285	3.9	3.8	-1.0	91	7.8	-7.8	0.2	94	17.9	-17.8	1.4	91	28.9	-28.9	0.4			

Daily Normals of Upper Air Winds (1971-2000)

223

MACHILIPATANAM

JULY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	264	6.2	6.2	0.7	277	7.9	7.8	-1.0	275	8.8	8.8	-0.8	281	4.2	4.1	-0.8	79	7.0	-6.9	-1.4	92	22.4	-22.4	0.8	88	39.0	-39.0	-1.6			
2	274	6.3	6.3	-0.4	284	9.6	9.3	-2.3	271	9.2	9.2	-0.1	276	6.0	6.0	-0.6	88	8.5	-8.5	-0.3	81	17.1	-16.9	-2.7	90	30.9	-30.9	0.2			
3	253	5.9	5.7	1.7	279	7.5	7.4	-1.2	274	10.1	10.1	-0.7	287	4.2	4.0	-1.2	91	9.2	-9.2	0.2	86	20.6	-20.5	-1.6	93	32.5	-32.5	1.6			
4	282	3.9	3.8	-0.8	287	6.8	6.5	-2.0	277	9.1	9.0	-1.1	276	4.7	4.7	-0.5	97	7.4	-7.3	0.9	86	18.2	-18.1	-1.4	88	35.9	-35.9	-1.4			
5	265	4.8	4.8	0.4	287	7.5	7.2	-2.2	274	8.6	8.6	-0.6	273	5.2	5.2	-0.3	99	8.8	-8.7	1.4	83	22.0	-21.8	-2.8	84	29.6	-29.5	-2.9			
6	276	6.5	6.5	-0.7	286	8.5	8.2	-2.3	278	8.3	8.2	-1.1	284	4.6	4.5	-1.1	84	9.1	-9.0	-1.0	85	18.2	-18.1	-1.7	88	36.5	-36.5	-1.1			
7	273	7.4	7.4	-0.4	283	9.9	9.7	-2.2	270	8.5	8.5	0.0	282	3.9	3.8	-0.8	86	7.8	-7.8	-0.5	76	14.9	-14.5	-3.6	92	30.8	-30.8	1.0			
8	242	6.1	5.4	2.9	276	6.3	6.3	-0.7	273	8.7	8.7	-0.4	282	4.7	4.6	-1.0	83	7.5	-7.4	-0.9	88	16.6	-16.6	-0.6	85	34.0	-33.9	-3.1			
9	257	7.1	6.9	1.6	286	9.3	8.9	-2.6	281	9.8	9.6	-1.9	265	3.3	3.3	0.3	75	8.3	-8.0	-2.1	88	20.8	-20.8	-0.7	84	33.1	-32.9	-3.3			
10	262	8.8	8.7	1.3	292	8.4	7.8	-3.2	285	11.1	10.7	-2.9	293	4.7	4.3	-1.8	89	8.8	-8.8	-0.2	80	19.1	-18.8	-3.3	84	37.1	-36.9	-4.0			
11	264	8.8	8.8	0.9	287	10.2	9.8	-3.0	278	9.4	9.3	-1.3	285	5.3	5.1	-1.4	79	6.1	-6.0	-1.2	84	19.2	-19.1	-1.9	88	33.4	-33.4	-0.9			
12	259	8.2	8.0	1.6	280	10.8	10.6	-1.9	278	11.1	11.0	-1.5	284	4.9	4.7	-1.2	89	6.7	-6.7	-0.1	87	21.3	-21.3	-1.0	87	34.5	-34.5	-1.7			
13	272	9.1	9.1	-0.3	281	9.4	9.2	-1.8	277	11.2	11.1	-1.3	271	6.8	6.8	-0.1	77	6.3	-6.1	-1.4	94	18.3	-18.3	1.2	90	27.6	-27.6	0.2			
14	306	3.9	3.2	-2.3	290	9.6	9.0	-3.3	282	9.6	9.4	-2.0	288	5.9	5.6	-1.8	84	6.7	-6.7	-0.7	84	16.5	-16.4	-1.8	82	34.7	-34.4	-4.7			
15	273	8.3	8.3	-0.4	285	10.5	10.1	-2.7	285	11.4	11.0	-3.0	293	4.7	4.3	-1.8	83	11.5	-11.4	-1.4	86	20.9	-20.9	-1.3	92	34.8	-34.8	1.5			
16	265	6.8	6.8	0.6	282	10.3	10.1	-2.1	284	10.1	9.8	-2.4	310	3.9	3.0	-2.5	80	9.0	-8.9	-1.5	92	21.8	-21.8	0.9	85	34.6	-34.5	-3.0			
17	275	6.2	6.2	-0.5	287	10.4	9.9	-3.1	280	11.8	11.6	-2.0	272	2.8	2.8	-0.1	85	8.6	-8.6	-0.7	86	16.7	-16.7	-1.2	91	30.6	-30.6	0.6			
18	268	7.3	7.3	0.2	281	10.9	10.7	-2.1	282	10.9	10.7	-2.3	269	5.5	5.5	0.1	96	8.3	-8.3	0.8	85	20.3	-20.2	-1.9	84	30.4	-30.3	-3.0			
19	262	7.7	7.6	1.1	283	10.3	10.0	-2.4	275	8.7	8.7	-0.8	275	4.9	4.9	-0.4	92	4.8	-4.8	0.2	89	19.1	-19.1	-0.2	82	35.6	-35.2	-5.0			
20	276	6.7	6.7	-0.7	287	10.1	9.6	-3.0	283	10.0	9.7	-2.3	290	4.6	4.3	-1.6	74	7.5	-7.2	-2.0	81	22.1	-21.8	-3.6	88	34.6	-34.6	-1.5			
21	275	7.3	7.3	-0.7	289	11.6	11.0	-3.7	289	8.8	8.3	-2.8	292	7.6	7.1	-2.8	62	7.2	-6.3	-3.4	87	16.9	-16.9	-0.9	82	33.2	-32.9	-4.6			
22	272	6.4	6.4	-0.2	295	11.2	10.1	-4.8	287	10.8	10.3	-3.1	284	5.9	5.7	-1.4	86	8.8	-8.8	-0.6	92	22.5	-22.5	0.6	87	33.2	-33.2	-1.8			
23	280	6.5	6.4	-1.1	281	10.1	9.9	-1.9	281	12.1	11.9	-2.4	278	4.3	4.3	-0.6	97	8.4	-8.3	1.0	93	21.0	-21.0	1.2	86	32.2	-32.1	-2.2			
24	276	8.2	8.2	-0.8	284	9.4	9.1	-2.2	280	11.3	11.1	-1.9	252	4.8	4.6	1.5	85	7.5	-7.5	-0.7	87	19.9	-19.9	-1.1	87	36.3	-36.2	-2.0			
25	261	7.6	7.5	1.2	282	11.2	10.9	-2.4	281	10.9	10.7	-2.1	299	5.5	4.8	-2.7	70	7.6	-7.1	-2.6	90	17.5	-17.5	0.0	91	30.4	-30.4	0.6			
26	265	9.1	9.1	0.8	281	11.1	10.9	-2.2	289	12.0	11.3	-3.9	295	4.7	4.3	-2.0	72	5.2	-5.0	-1.6	82	16.9	-16.7	-2.4	89	33.1	-33.1	-0.6			
27	278	7.6	7.5	-1.1	282	10.7	10.5	-2.3	284	11.7	11.3	-2.9	274	8.6	8.6	-0.6	92	6.2	-6.2	0.2	81	16.1	-15.9	-2.4	91	29.4	-29.4	0.6			
28	281	8.6	8.5	-1.6	287	10.9	10.4	-3.1	284	11.9	11.6	-2.8	273	5.6	5.6	-0.3	100	7.1	-7.0	1.2	80	19.2	-18.9	-3.5	86	31.5	-31.4	-2.3			
29	278	8.4	8.3	-1.2	280	9.6	9.4	-1.7	284	10.8	10.5	-2.6	264	7.2	7.2	0.7	89	8.4	-8.4	-0.1	89	16.8	-16.8	-0.2	86	29.0	-28.9	-2.0			
30	283	7.6	7.4	-1.7	288	11.4	10.8	-3.5	284	13.0	12.6	-3.1	289	4.9	4.6	-1.6	74	7.6	-7.3	-2.1	88	17.5	-17.5	-0.7	85	30.7	-30.6	-2.5			
31	284	8.7	8.4	-2.1	288	10.8	10.3	-3.4	287	10.0	9.6	-2.9	289	3.1	2.9	-1.0	74	9.3	-9.0	-2.5	90	21.3	-21.3	-0.1	88	37.2	-37.2	-1.6			

Daily Normals of Upper Air Winds (1971-2000)

MACHILIPATANAM

AUGUST

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	290	8.4	7.9	-2.8	290	10.7	10.1	-3.6	287	10.3	9.9	-3.0	279	3.9	3.9	-0.6	82	7.5	-7.4	-1.1	86	21.0	-20.9	-1.6	86	34.0	-33.9	-2.2			
2	286	8.7	8.4	-2.4	288	10.4	9.9	-3.2	282	10.8	10.6	-2.2	290	3.2	3.0	-1.1	84	5.5	-5.5	-0.6	88	20.3	-20.3	-0.6	82	29.8	-29.5	-3.9			
3	261	7.7	7.6	1.2	288	9.5	9.0	-3.0	282	10.1	9.9	-2.1	270	5.7	5.7	0.0	100	7.1	-7.0	1.2	82	19.8	-19.6	-2.6	82	33.6	-33.3	-4.4			
4	288	6.0	5.7	-1.8	289	8.4	8.0	-2.7	281	9.9	9.7	-1.9	271	4.2	4.2	-0.1	98	7.9	-7.8	1.1	90	21.0	-21.0	0.0	82	29.6	-29.3	-4.0			
5	247	3.6	3.3	1.4	291	9.7	9.1	-3.5	283	10.5	10.2	-2.4	274	4.6	4.6	-0.3	96	5.7	-5.7	0.6	88	19.7	-19.7	-0.8	83	27.9	-27.7	-3.6			
6	272	4.7	4.7	-0.2	286	8.4	8.1	-2.3	281	10.2	10.0	-2.0	290	5.1	4.8	-1.7	82	5.0	-5.0	-0.7	84	16.8	-16.7	-1.7	88	29.7	-29.7	-0.9			
7	274	6.7	6.7	-0.5	284	7.8	7.6	-1.9	285	9.0	8.7	-2.4	278	7.4	7.3	-1.0	68	5.0	-4.6	-1.9	75	14.4	-13.9	-3.8	89	32.0	-32.0	-0.7			
8	288	8.4	8.0	-2.6	286	11.0	10.6	-3.1	287	11.2	10.7	-3.2	283	8.1	7.9	-1.8	67	4.8	-4.4	-1.9	84	15.4	-15.3	-1.6	84	29.8	-29.6	-3.3			
9	291	7.4	6.9	-2.6	287	9.5	9.1	-2.7	286	10.9	10.5	-3.0	293	5.9	5.4	-2.3	86	6.2	-6.2	-0.4	88	14.7	-14.7	-0.5	88	33.6	-33.6	-1.4			
10	279	9.0	8.9	-1.4	286	11.7	11.2	-3.3	283	10.2	9.9	-2.3	290	4.0	3.8	-1.4	94	8.3	-8.3	0.6	89	18.9	-18.9	-0.4	88	35.2	-35.2	-1.3			
11	270	7.2	7.2	0.0	288	9.6	9.1	-3.0	274	9.1	9.1	-0.7	261	3.9	3.9	0.6	89	8.1	-8.1	-0.2	86	17.8	-17.8	-1.2	87	34.8	-34.7	-2.0			
12	286	7.1	6.8	-2.0	291	9.4	8.8	-3.3	283	11.1	10.8	-2.5	279	5.7	5.6	-0.9	91	8.2	-8.2	0.1	91	22.7	-22.7	0.4	88	31.5	-31.5	-1.1			
13	283	8.6	8.4	-2.0	289	12.0	11.3	-3.9	287	11.0	10.5	-3.3	279	5.0	4.9	-0.8	93	10.3	-10.3	0.6	83	18.9	-18.8	-2.3	91	30.7	-30.7	0.8			
14	288	6.8	6.5	-2.1	292	10.6	9.9	-3.9	293	8.6	7.9	-3.3	291	3.4	3.2	-1.2	93	8.7	-8.7	0.4	91	19.6	-19.6	0.5	89	32.5	-32.5	-0.5			
15	290	7.2	6.7	-2.5	291	11.0	10.3	-3.9	286	9.6	9.2	-2.7	288	3.5	3.3	-1.1	86	8.8	-8.8	-0.6	91	22.2	-22.2	0.4	89	34.0	-34.0	-0.4			
16	291	7.9	7.4	-2.9	293	10.6	9.8	-4.1	292	9.2	8.5	-3.4	305	4.7	3.9	-2.7	80	6.6	-6.5	-1.1	89	17.9	-17.9	-0.4	84	32.0	-31.8	-3.4			
17	281	6.3	6.2	-1.2	286	9.8	9.4	-2.7	287	9.2	8.8	-2.7	298	4.7	4.2	-2.2	82	5.8	-5.7	-0.8	90	17.9	-17.9	-0.1	90	31.0	-31.0	-0.1			
18	272	6.7	6.7	-0.2	285	10.6	10.2	-2.8	281	9.9	9.7	-1.9	272	4.7	4.7	-0.2	86	4.3	-4.3	-0.3	84	16.3	-16.2	-1.8	86	30.6	-30.5	-2.3			
19	273	4.4	4.4	-0.2	286	8.7	8.4	-2.4	284	9.5	9.2	-2.3	270	4.6	4.6	0.0	86	8.7	-8.7	-0.6	77	16.3	-15.9	-3.6	91	31.9	-31.9	0.6			
20	287	7.7	7.4	-2.3	289	10.7	10.1	-3.4	283	10.7	10.4	-2.4	258	4.3	4.2	0.9	82	8.8	-8.7	-1.3	88	17.6	-17.6	-0.5	89	31.4	-31.4	-0.4			
21	283	5.4	5.3	-1.2	290	9.5	8.9	-3.3	285	9.0	8.7	-2.3	298	3.4	3.0	-1.6	93	7.4	-7.4	0.4	88	16.6	-16.6	-0.5	89	32.5	-32.5	-0.6			
22	295	5.3	4.8	-2.2	289	9.1	8.6	-2.9	272	9.2	9.2	-0.3	260	4.1	4.0	0.7	84	7.1	-7.1	-0.8	84	18.7	-18.6	-1.8	84	30.0	-29.8	-3.0			
23	289	3.7	3.5	-1.2	286	7.0	6.7	-1.9	274	8.0	8.0	-0.5	239	3.1	2.7	1.6	94	7.6	-7.6	0.5	86	18.7	-18.7	-1.3	83	32.1	-31.8	-4.1			
24	257	3.5	3.4	0.8	282	7.1	6.9	-1.5	282	7.5	7.3	-1.5	261	2.5	2.5	0.4	84	7.6	-7.6	-0.8	88	18.1	-18.1	-0.6	83	24.5	-24.3	-2.8			
25	286	6.6	6.4	-1.8	289	8.2	7.7	-2.7	283	7.4	7.2	-1.7	286	3.7	3.6	-1.0	89	8.9	-8.9	-0.1	89	19.0	-19.0	-0.4	85	32.9	-32.8	-2.8			
26	271	6.9	6.9	-0.1	294	8.5	7.8	-3.4	294	9.3	8.5	-3.7	298	4.4	3.9	-2.1	81	5.8	-5.7	-0.9	90	13.8	-13.8	0.0	95	32.0	-31.9	2.7			
27	282	9.0	8.8	-1.9	293	10.3	9.5	-4.0	284	8.8	8.5	-2.1	287	3.0	2.9	-0.9	70	5.3	-5.0	-1.8	92	17.1	-17.1	0.6	91	30.1	-30.1	0.4			
28	279	7.6	7.5	-1.2	288	11.0	10.5	-3.4	291	10.2	9.5	-3.7	287	5.5	5.3	-1.6	82	8.7	-8.6	-1.2	86	19.0	-19.0	-1.2	83	30.1	-29.8	-3.9			
29	280	8.4	8.3	-1.5	291	10.4	9.7	-3.8	287	8.4	8.1	-2.4	297	4.2	3.7	-1.9	75	5.1	-4.9	-1.3	79	17.0	-16.7	-3.2	94	34.5	-34.4	2.5			
30	280	10.2	10.0	-1.8	286	10.3	9.9	-2.9	286	9.1	8.8	-2.5	273	5.1	5.1	-0.3	90	7.3	-7.3	0.0	92	16.8	-16.8	0.5	83	29.9	-29.7	-3.6			
31	271	8.7	8.7	-0.2	277	9.2	9.1	-1.1	285	8.8	8.5	-2.3	267	3.4	3.4	0.2	105	9.3	-9.0	2.4	84	18.2	-18.1	-2.0	89	30.4	-30.4	-0.5			

Daily Normals of Upper Air Winds (1971-2000)

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MACHILIPATANAM

SEPTEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	272	8.2	8.2	-0.3	282	8.6	8.4	-1.8	280	8.9	8.8	-1.5	263	4.1	4.1	0.5	119	8.1	-7.1	3.9	87	19.0	-19.0	-1.1	85	22.6	-22.5	-2.1			
2	286	7.5	7.2	-2.1	281	7.4	7.3	-1.4	278	8.4	8.3	-1.2	270	2.0	2.0	0.0	97	7.3	-7.2	0.9	77	16.6	-16.2	-3.7	98	28.0	-27.8	3.7			
3	279	7.3	7.2	-1.1	281	7.1	7.0	-1.3	291	7.7	7.2	-2.8	271	5.4	5.4	-0.1	96	5.3	-5.3	0.6	86	17.4	-17.4	-1.1	99	24.9	-24.6	4.0			
4	276	7.3	7.3	-0.8	290	8.6	8.1	-3.0	287	7.7	7.4	-2.3	276	2.7	2.7	-0.3	78	8.5	-8.3	-1.8	84	16.9	-16.8	-1.7	89	27.6	-27.6	-0.4			
5	263	5.5	5.5	0.7	283	7.3	7.1	-1.7	277	8.0	7.9	-1.0	268	2.4	2.4	0.1	88	7.1	-7.1	-0.3	91	20.5	-20.5	0.5	90	23.8	-23.8	0.2			
6	275	4.5	4.5	-0.4	284	7.2	7.0	-1.8	284	7.7	7.5	-1.9	272	2.6	2.6	-0.1	91	6.7	-6.7	0.1	85	17.2	-17.1	-1.6	80	24.7	-24.3	-4.2			
7	274	4.8	4.8	-0.3	298	7.1	6.3	-3.3	276	5.3	5.3	-0.6	275	2.4	2.4	-0.2	89	6.0	-6.0	-0.1	83	13.8	-13.7	-1.8	88	23.7	-23.7	-1.0			
8	293	4.8	4.4	-1.9	294	7.2	6.6	-3.0	286	6.6	6.3	-1.8	333	1.8	0.8	-1.6	96	6.7	-6.7	0.7	84	13.6	-13.5	-1.3	91	21.7	-21.7	0.3			
9	284	4.9	4.7	-1.2	308	7.0	5.5	-4.3	300	6.2	5.4	-3.1	275	1.2	1.2	-0.1	94	4.8	-4.8	0.3	88	15.0	-15.0	-0.6	96	26.0	-25.8	2.8			
10	287	6.5	6.2	-1.9	301	7.6	6.5	-3.9	304	5.7	4.7	-3.2	261	2.5	2.5	0.4	87	4.5	-4.5	-0.2	91	13.1	-13.1	0.3	105	24.6	-23.8	6.4			
11	296	4.1	3.7	-1.8	298	6.4	5.6	-3.0	285	6.2	6.0	-1.6	260	3.5	3.4	0.6	82	5.7	-5.6	-0.8	90	14.8	-14.8	-0.1	94	24.5	-24.4	1.6			
12	275	4.3	4.3	-0.4	300	6.7	5.8	-3.3	286	5.8	5.6	-1.6	252	2.9	2.8	0.9	97	7.3	-7.2	0.9	98	15.8	-15.7	2.1	85	22.9	-22.8	-2.1			
13	260	5.0	4.9	0.9	299	5.6	4.9	-2.7	286	5.8	5.6	-1.6	266	3.1	3.1	0.2	98	4.5	-4.5	0.6	85	14.4	-14.3	-1.3	89	23.6	-23.6	-0.5			
14	276	4.5	4.5	-0.5	295	6.3	5.7	-2.7	283	7.0	6.8	-1.6	263	2.4	2.4	0.3	95	5.3	-5.3	0.5	86	15.5	-15.5	-1.0	83	22.0	-21.8	-2.7			
15	286	3.6	3.5	-1.0	300	6.1	5.3	-3.0	291	6.0	5.6	-2.2	255	3.5	3.4	0.9	107	6.1	-5.8	1.8	98	14.8	-14.7	2.1	95	22.3	-22.2	1.9			
16	283	4.3	4.2	-1.0	296	5.5	4.9	-2.4	291	5.3	4.9	-1.9	274	3.0	3.0	-0.2	82	6.5	-6.4	-0.9	95	13.4	-13.4	1.1	100	26.4	-26.0	4.6			
17	295	5.4	4.9	-2.3	304	6.1	5.1	-3.4	296	4.8	4.3	-2.1	263	1.7	1.7	0.2	115	7.1	-6.4	3.0	93	14.6	-14.6	0.7	86	23.0	-22.9	-1.6			
18	312	6.7	5.0	-4.5	318	5.8	3.9	-4.3	316	4.0	2.8	-2.9	103	1.3	-1.3	0.3	85	7.6	-7.6	-0.6	93	17.1	-17.1	1.0	84	22.8	-22.7	-2.3			
19	313	4.0	2.9	-2.7	318	4.7	3.2	-3.5	315	3.5	2.5	-2.5	45	0.4	-0.3	-0.3	93	6.7	-6.7	0.3	99	15.2	-15.0	2.3	79	18.6	-18.2	-3.6			
20	350	3.5	0.6	-3.4	331	4.5	2.2	-3.9	340	3.5	1.2	-3.3	360	0.9	0.0	-0.9	86	6.9	-6.9	-0.5	109	11.7	-11.1	3.8	86	20.6	-20.5	-1.5			
21	309	2.2	1.7	-1.4	314	4.2	3.0	-2.9	329	3.3	1.7	-2.8	36	0.9	-0.5	-0.7	80	6.5	-6.4	-1.1	97	13.4	-13.3	1.7	86	24.0	-23.9	-1.8			
22	298	1.9	1.7	-0.9	306	3.6	2.9	-2.1	293	2.1	1.9	-0.8	100	1.1	-1.1	0.2	99	6.1	-6.0	1.0	99	12.4	-12.3	1.9	98	19.7	-19.5	2.7			
23	13	0.9	-0.2	-0.9	315	1.1	0.8	-0.8	347	1.8	0.4	-1.8	108	2.2	-2.1	0.7	97	7.9	-7.8	0.9	93	11.9	-11.9	0.7	86	21.5	-21.4	-1.6			
24	313	2.3	1.7	-1.6	291	1.9	1.8	-0.7	304	0.7	0.6	-0.4	183	2.0	0.1	2.0	114	5.6	-5.1	2.3	103	9.9	-9.7	2.2	89	22.5	-22.5	-0.2			
25	276	2.0	2.0	-0.2	333	2.9	1.3	-2.6	318	1.2	0.8	-0.9	210	0.8	0.4	0.7	94	4.7	-4.7	0.3	87	10.1	-10.1	-0.6	98	16.4	-16.2	2.3			
26	300	1.4	1.2	-0.7	317	1.6	1.1	-1.2	286	1.5	1.4	-0.4	115	1.9	-1.7	0.8	96	6.3	-6.3	0.7	112	11.5	-10.7	4.3	92	21.0	-21.0	0.6			
27	83	1.6	-1.6	-0.2	360	0.8	0.0	-0.8	348	1.4	0.3	-1.4	135	0.6	-0.4	0.4	105	5.1	-4.9	1.3	92	10.2	-10.2	0.4	93	21.7	-21.7	1.2			
28	82	1.5	-1.5	-0.2	337	1.5	0.6	-1.4	35	1.2	-0.7	-1.0	137	2.1	-1.4	1.5	94	5.7	-5.7	0.4	90	10.0	-10.0	0.0	83	18.0	-17.9	-2.2			
29	120	2.8	-2.4	1.4	23	2.5	-1.0	-2.3	65	1.9	-1.7	-0.8	72	1.3	-1.2	-0.4	79	4.6	-4.5	-0.9	100	10.0	-9.8	1.8	98	17.7	-17.5	2.5			
30	95	3.2	-3.2	0.3	35	2.9	-1.7	-2.4	45	2.0	-1.4	-1.4	34	1.4	-0.8	-1.2	98	4.5	-4.5	0.6	89	8.9	-8.9	-0.1	87	16.6	-16.6	-0.8			

Daily Normals of Upper Air Winds (1971-2000)

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MACHILIPATANAM

OCTOBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	118	3.4	-3.0	1.6	34	2.5	-1.4	-2.1	61	2.1	-1.8	-1.0	96	1.9	-1.9	0.2	99	4.9	-4.8	0.8	98	7.2	-7.1	1.0	101	14.8	-14.5	2.8			
2	68	1.1	-1.0	-0.4	31	1.7	-0.9	-1.5	48	1.3	-1.0	-0.9	94	1.6	-1.6	0.1	102	3.8	-3.7	0.8	118	8.1	-7.2	3.8	85	14.8	-14.7	-1.3			
3	52	1.1	-0.9	-0.7	350	3.4	0.6	-3.3	18	2.2	-0.7	-2.1	98	0.7	-0.7	0.1	122	3.8	-3.2	2.0	97	6.7	-6.7	0.8	95	15.3	-15.2	1.4			
4	16	2.5	-0.7	-2.4	5	4.2	-0.4	-4.2	358	2.9	0.1	-2.9	357	1.7	0.1	-1.7	125	4.2	-3.4	2.4	106	8.1	-7.8	2.3	93	13.2	-13.2	0.7			
5	96	0.9	-0.9	0.1	303	2.0	1.7	-1.1	333	2.0	0.9	-1.8	166	1.6	-0.4	1.6	148	4.0	-2.1	3.4	111	6.4	-6.0	2.3	104	13.2	-12.8	3.1			
6	84	3.8	-3.8	-0.4	355	1.2	0.1	-1.2	59	1.2	-1.0	-0.6	169	1.0	-0.2	1.0	97	4.0	-4.0	0.5	90	11.7	-11.7	0.1	103	14.7	-14.3	3.4			
7	79	4.4	-4.3	-0.8	33	2.4	-1.3	-2.0	6	1.0	-0.1	-1.0	156	2.4	-1.0	2.2	126	4.2	-3.4	2.5	97	9.1	-9.0	1.1	112	13.9	-12.8	5.3			
8	88	5.4	-5.4	-0.2	33	2.7	-1.5	-2.3	47	1.6	-1.2	-1.1	174	1.9	-0.2	1.9	130	3.8	-2.9	2.4	100	7.7	-7.6	1.3	96	12.4	-12.3	1.4			
9	108	3.6	-3.4	1.1	52	1.1	-0.9	-0.7	98	1.4	-1.4	0.2	192	2.4	0.5	2.3	140	4.7	-3.0	3.6	107	9.7	-9.3	2.8	119	13.8	-12.1	6.7			
10	114	3.7	-3.4	1.5	39	1.9	-1.2	-1.5	35	1.6	-0.9	-1.3	118	1.5	-1.3	0.7	95	4.3	-4.3	0.4	89	8.8	-8.8	-0.2	92	11.0	-11.0	0.4			
11	101	2.1	-2.1	0.4	38	1.6	-1.0	-1.3	29	1.0	-0.5	-0.9	129	1.4	-1.1	0.9	106	2.5	-2.4	0.7	113	6.3	-5.8	2.5	98	11.2	-11.1	1.6			
12	65	1.9	-1.7	-0.8	27	2.8	-1.3	-2.5	41	2.0	-1.3	-1.5	110	3.0	-2.8	1.0	98	4.9	-4.8	0.7	116	3.2	-2.9	1.4	115	7.5	-6.8	3.2			
13	55	3.9	-3.2	-2.2	34	5.0	-2.8	-4.2	31	3.7	-1.9	-3.2	114	3.0	-2.7	1.2	126	3.1	-2.5	1.8	134	5.5	-4.0	3.8	120	7.7	-6.7	3.8			
14	22	3.8	-1.4	-3.5	21	5.1	-1.8	-4.8	22	4.8	-1.8	-4.5	248	0.5	0.5	0.2	112	1.1	-1.0	0.4	145	5.5	-3.2	4.5	98	11.1	-11.0	1.6			
15	3	4.2	-0.2	-4.2	28	6.4	-3.0	-5.6	22	4.0	-1.5	-3.7	51	1.4	-1.1	-0.9	139	3.8	-2.5	2.9	136	6.4	-4.4	4.6	120	9.7	-8.4	4.8			
16	2	2.6	-0.1	-2.6	23	3.3	-1.3	-3.0	353	2.6	0.3	-2.6	191	1.0	0.2	1.0	165	3.1	-0.8	3.0	118	5.3	-4.7	2.5	92	8.6	-8.6	0.3			
17	37	4.1	-2.5	-3.3	52	5.3	-4.2	-3.3	16	3.5	-1.0	-3.4	107	1.0	-1.0	0.3	131	2.1	-1.6	1.4	118	5.9	-5.2	2.8	102	12.9	-12.6	2.6			
18	28	4.4	-2.1	-3.9	53	3.6	-2.9	-2.2	45	2.8	-2.0	-2.0	146	0.4	-0.2	0.3	153	3.0	-1.4	2.7	166	4.0	-1.0	3.9	100	8.2	-8.1	1.5			
19	69	3.4	-3.2	-1.2	63	2.8	-2.5	-1.3	60	0.8	-0.7	-0.4	164	2.5	-0.7	2.4	155	3.5	-1.5	3.2	114	3.9	-3.6	1.6	100	8.4	-8.3	1.4			
20	45	3.1	-2.2	-2.2	24	3.6	-1.5	-3.3	360	1.3	0.0	-1.3	207	1.1	0.5	1.0	111	1.9	-1.8	0.7	127	3.9	-3.1	2.3	109	7.7	-7.3	2.5			
21	58	1.9	-1.6	-1.0	30	3.4	-1.7	-2.9	54	2.7	-2.2	-1.6	180	0.7	0.0	0.7	125	1.9	-1.6	1.1	179	4.6	-0.1	4.6	136	5.9	-4.1	4.3			
22	82	1.4	-1.4	-0.2	37	3.8	-2.3	-3.0	54	0.9	-0.7	-0.5	18	0.9	-0.3	-0.9	180	0.6	0.0	0.6	159	4.2	-1.5	3.9	116	5.2	-4.7	2.3			
23	82	1.5	-1.5	-0.2	35	4.2	-2.4	-3.4	22	2.9	-1.1	-2.7	90	1.0	-1.0	0.0	140	0.8	-0.5	0.6	147	4.2	-2.3	3.5	120	6.8	-5.9	3.4			
24	86	3.1	-3.1	-0.2	52	4.6	-3.6	-2.8	47	2.5	-1.8	-1.7	69	2.5	-2.3	-0.9	82	0.7	-0.7	-0.1	174	3.1	-0.3	3.1	132	5.1	-3.8	3.4			
25	73	2.4	-2.3	-0.7	58	5.7	-4.8	-3.0	30	4.6	-2.3	-4.0	81	1.2	-1.2	-0.2	234	0.9	0.7	0.5	165	4.6	-1.2	4.4	120	4.4	-3.8	2.2			
26	42	4.5	-3.0	-3.3	41	5.7	-3.8	-4.3	26	4.9	-2.1	-4.4	71	1.8	-1.7	-0.6	175	1.1	-0.1	1.1	177	4.5	-0.2	4.5	75	4.2	-4.1	-1.1			
27	60	3.6	-3.1	-1.8	56	5.0	-4.1	-2.8	61	3.1	-2.7	-1.5	72	0.3	-0.3	-0.1	175	2.2	-0.2	2.2	193	5.5	1.2	5.4	147	7.4	-4.1	6.2			
28	25	3.1	-1.3	-2.8	49	5.0	-3.8	-3.3	40	3.0	-1.9	-2.3	6	1.0	-0.1	-1.0	295	2.1	1.9	-0.9	193	3.5	0.8	3.4	113	7.5	-6.9	3.0			
29	56	5.0	-4.1	-2.8	61	6.5	-5.7	-3.1	82	4.5	-4.5	-0.6	218	1.6	1.0	1.3	203	4.3	1.7	4.0	186	5.0	0.5	5.0	119	8.2	-7.2	4.0			
30	56	5.4	-4.5	-3.0	48	5.8	-4.3	-3.9	72	2.6	-2.5	-0.8	122	1.9	-1.6	1.0	243	3.9	3.5	1.8	207	8.3	3.7	7.4	138	7.4	-4.9	5.5			
31	69	2.8	-2.6	-1.0	57	5.5	-4.6	-3.0	95	3.4	-3.4	0.3	175	1.2	-0.1	1.2	232	4.2	3.3	2.6	210	7.8	3.9	6.7	128	8.0	-6.3	5.0			

Daily Normals of Upper Air Winds (1971-2000)

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MACHILIPATANAM

NOVEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	92	4.8	-4.8	0.2	63	6.5	-5.8	-3.0	51	4.9	-3.8	-3.1	41	2.1	-1.4	-1.6	245	2.1	1.9	0.9	191	4.4	0.8	4.3	134	7.9	-5.7	5.5			
2	76	5.5	-5.3	-1.3	58	6.7	-5.7	-3.6	65	5.3	-4.8	-2.2	65	2.9	-2.6	-1.2	237	5.9	5.0	3.2	237	6.1	5.1	3.3	114	7.9	-7.2	3.2			
3	72	6.1	-5.8	-1.9	71	5.5	-5.2	-1.8	86	3.1	-3.1	-0.2	43	2.5	-1.7	-1.8	263	4.2	4.2	0.5	186	8.1	0.9	8.1	106	5.4	-5.2	1.5			
4	44	2.8	-1.9	-2.0	65	4.4	-4.0	-1.9	45	2.8	-2.0	-2.0	108	2.0	-1.9	0.6	236	2.3	1.9	1.3	185	9.0	0.8	9.0	150	8.2	-4.1	7.1			
5	70	5.0	-4.7	-1.7	53	4.9	-3.9	-2.9	39	3.2	-2.0	-2.5	146	0.7	-0.4	0.6	247	2.3	2.1	0.9	207	7.2	3.2	6.4	131	4.9	-3.7	3.2			
6	60	5.6	-4.9	-2.8	59	6.0	-5.1	-3.1	65	3.8	-3.5	-1.6	331	1.3	0.6	-1.1	252	3.2	3.0	1.0	216	8.2	4.8	6.7	183	2.2	0.1	2.2			
7	75	6.8	-6.6	-1.8	63	6.5	-5.8	-3.0	67	4.4	-4.1	-1.7	122	1.3	-1.1	0.7	241	2.6	2.3	1.3	183	6.6	0.4	6.6	136	3.2	-2.2	2.3			
8	75	7.6	-7.3	-2.0	68	5.4	-5.0	-2.0	61	3.3	-2.9	-1.6	7	2.4	-0.3	-2.4	323	1.5	0.9	-1.2	184	5.9	0.4	5.9	135	1.8	-1.3	1.3			
9	78	4.2	-4.1	-0.9	47	4.2	-3.1	-2.9	69	3.1	-2.9	-1.1	90	0.6	-0.6	0.0	261	3.9	3.9	0.6	196	6.6	1.8	6.3	127	2.6	-2.1	1.6			
10	75	6.2	-6.0	-1.6	52	5.5	-4.3	-3.4	68	1.8	-1.7	-0.7	315	0.4	0.3	-0.3	262	4.1	4.1	0.6	226	6.9	4.9	4.8	139	5.5	-3.6	4.1			
11	73	5.1	-4.9	-1.5	38	5.3	-3.3	-4.2	24	3.2	-1.3	-2.9	8	2.9	-0.4	-2.9	248	3.5	3.2	1.3	218	7.8	4.8	6.1	184	3.1	0.2	3.1			
12	66	3.6	-3.3	-1.5	37	5.3	-3.2	-4.2	34	3.6	-2.0	-3.0	15	2.3	-0.6	-2.2	230	3.3	2.5	2.1	216	10.5	6.1	8.5	167	4.3	-1.0	4.2			
13	65	6.3	-5.7	-2.6	56	5.5	-4.6	-3.1	51	3.6	-2.8	-2.3	68	2.4	-2.2	-0.9	291	2.2	2.1	-0.8	199	6.2	2.0	5.9	220	4.5	2.9	3.5			
14	68	7.2	-6.7	-2.7	51	4.6	-3.6	-2.9	65	4.2	-3.8	-1.8	53	2.1	-1.7	-1.3	270	4.0	4.0	0.0	220	5.9	3.8	4.5	166	3.6	-0.9	3.5			
15	72	5.6	-5.3	-1.7	48	4.0	-3.0	-2.7	72	2.2	-2.1	-0.7	70	1.5	-1.4	-0.5	246	2.2	2.0	0.9	206	5.7	2.5	5.1	100	2.8	-2.8	0.5			
16	80	5.7	-5.6	-1.0	54	4.4	-3.6	-2.6	101	2.6	-2.6	0.5	10	1.1	-0.2	-1.1	263	3.5	3.5	0.4	208	7.8	3.6	6.9	144	4.8	-2.8	3.9			
17	90	4.9	-4.9	0.0	50	4.8	-3.7	-3.1	90	1.4	-1.4	0.0	209	1.3	0.6	1.1	247	6.3	5.8	2.5	207	8.7	4.0	7.7	171	0.6	-0.1	0.6			
18	76	5.5	-5.3	-1.3	52	4.2	-3.3	-2.6	20	2.0	-0.7	-1.9	270	1.2	1.2	0.0	258	8.8	8.6	1.9	227	12.0	8.8	8.2	192	3.9	0.8	3.8			
19	83	5.1	-5.1	-0.6	37	4.0	-2.4	-3.2	38	2.4	-1.5	-1.9	288	2.8	2.7	-0.9	251	9.7	9.2	3.2	222	12.5	8.4	9.2	201	5.5	2.0	5.1			
20	75	4.9	-4.7	-1.3	34	4.7	-2.6	-3.9	20	1.2	-0.4	-1.1	310	3.4	2.6	-2.2	245	12.5	11.4	5.2	219	14.1	8.8	11.0	179	5.2	-0.1	5.2			
21	65	6.4	-5.8	-2.7	43	5.0	-3.4	-3.6	35	2.4	-1.4	-2.0	257	2.3	2.2	0.5	241	11.5	10.1	5.5	222	15.9	10.6	11.9	193	1.7	0.4	1.7			
22	75	6.7	-6.5	-1.8	49	4.3	-3.2	-2.8	88	2.5	-2.5	-0.1	251	5.5	5.2	1.8	237	12.3	10.3	6.8	227	14.0	10.3	9.5	209	5.8	2.8	5.1			
23	73	5.7	-5.4	-1.7	33	5.0	-2.7	-4.2	41	2.3	-1.5	-1.7	243	2.8	2.5	1.3	253	9.5	9.1	2.7	217	14.5	8.7	11.6	291	1.4	1.3	-0.5			
24	34	4.0	-2.2	-3.3	22	5.2	-1.9	-4.8	16	2.9	-0.8	-2.8	315	3.8	2.7	-2.7	260	9.6	9.5	1.6	222	16.1	10.8	11.9	213	6.0	3.3	5.0			
25	52	2.8	-2.2	-1.7	29	5.2	-2.5	-4.6	36	1.4	-0.8	-1.1	322	3.3	2.0	-2.6	262	8.7	8.6	1.2	233	13.2	10.6	7.9	228	6.0	4.5	4.0			
26	55	3.9	-3.2	-2.2	31	4.2	-2.2	-3.6	56	2.7	-2.2	-1.5	336	3.9	1.6	-3.6	282	7.5	7.3	-1.5	243	11.0	9.8	4.9	294	2.7	2.5	-1.1			
27	65	4.7	-4.2	-2.0	44	4.0	-2.8	-2.9	43	1.8	-1.2	-1.3	44	3.2	-2.2	-2.3	245	5.1	4.6	2.1	231	11.2	8.7	7.1	261	5.5	5.4	0.9			
28	71	5.0	-4.7	-1.6	53	6.9	-5.5	-4.2	31	3.5	-1.8	-3.0	321	4.1	2.6	-3.2	272	10.5	10.5	-0.3	225	14.2	10.1	10.0	234	2.6	2.1	1.5			
29	67	6.0	-5.5	-2.3	31	4.7	-2.4	-4.0	14	3.7	-0.9	-3.6	320	3.1	2.0	-2.4	256	10.4	10.1	2.6	234	13.6	11.0	8.0	208	3.4	1.6	3.0			
30	74	3.7	-3.6	-1.0	38	4.1	-2.5	-3.2	39	2.6	-1.6	-2.0	354	3.6	0.4	-3.6	276	7.2	7.2	-0.8	222	10.5	7.0	7.8	254	6.6	6.4	1.8			

Daily Normals of Upper Air Winds (1971-2000)

228

MACHILIPATANAM

DECEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	62	3.8	-3.4	-1.8	58	4.6	-3.9	-2.4	25	2.6	-1.1	-2.4	353	2.4	0.3	-2.4	282	7.7	7.5	-1.6	224	12.8	8.9	9.2	202	4.6	1.7	4.3			
2	66	4.2	-3.8	-1.7	47	5.3	-3.9	-3.6	45	3.1	-2.2	-2.2	326	2.9	1.6	-2.4	252	8.9	8.5	2.7	221	12.1	7.9	9.1	248	6.6	6.1	2.5			
3	59	6.5	-5.6	-3.3	52	6.0	-4.7	-3.7	63	3.7	-3.3	-1.7	360	3.6	0.0	-3.6	258	7.8	7.6	1.6	228	10.9	8.1	7.3	167	0.9	-0.2	0.9			
4	57	6.7	-5.6	-3.7	51	5.8	-4.5	-3.7	34	3.6	-2.0	-3.0	343	3.0	0.9	-2.9	268	7.2	7.2	0.2	245	13.4	12.1	5.7	237	8.2	6.9	4.4			
5	67	5.9	-5.4	-2.3	38	4.4	-2.7	-3.5	50	3.0	-2.3	-1.9	5	2.1	-0.2	-2.1	251	7.1	6.7	2.3	234	11.0	8.9	6.4	281	3.7	3.6	-0.7			
6	78	5.4	-5.3	-1.1	38	4.6	-2.8	-3.6	43	3.7	-2.5	-2.7	360	2.0	0.0	-2.0	271	7.6	7.6	-0.1	231	15.1	11.8	9.5	262	5.1	5.1	0.7			
7	62	5.1	-4.5	-2.4	44	4.7	-3.3	-3.4	57	4.4	-3.7	-2.4	51	3.5	-2.7	-2.2	257	9.1	8.9	2.1	242	14.4	12.7	6.8	218	8.3	5.1	6.5			
8	61	4.7	-4.1	-2.3	53	4.8	-3.8	-2.9	86	4.3	-4.3	-0.3	188	1.5	0.2	1.5	267	9.1	9.1	0.4	219	15.7	9.8	12.3	209	4.5	2.2	3.9			
9	56	3.6	-3.0	-2.0	57	3.8	-3.2	-2.1	97	2.3	-2.3	0.3	229	2.0	1.5	1.3	250	8.3	7.8	2.8	240	12.8	11.1	6.3	244	4.9	4.4	2.1			
10	51	3.2	-2.5	-2.0	55	3.9	-3.2	-2.2	45	0.8	-0.6	-0.6	297	3.0	2.7	-1.4	267	10.7	10.7	0.5	242	14.6	12.9	6.9	173	4.0	-0.5	4.0			
11	63	4.7	-4.2	-2.1	71	4.2	-4.0	-1.4	83	2.5	-2.5	-0.3	284	0.4	0.4	-0.1	249	8.3	7.7	3.0	228	13.8	10.3	9.2	222	5.9	4.0	4.4			
12	65	5.1	-4.6	-2.1	64	3.9	-3.5	-1.7	66	2.0	-1.8	-0.8	236	3.4	2.8	1.9	240	9.2	8.0	4.6	233	16.1	12.8	9.7	219	6.5	4.1	5.0			
13	62	4.9	-4.3	-2.3	70	4.5	-4.2	-1.5	109	2.8	-2.6	0.9	249	5.3	5.0	1.9	258	9.5	9.3	2.0	259	10.5	10.3	2.0	246	10.7	9.8	4.3			
14	50	3.8	-2.9	-2.4	62	3.6	-3.2	-1.7	56	0.4	-0.3	-0.2	270	3.8	3.8	0.0	259	11.1	10.9	2.2	244	17.1	15.3	7.6	264	8.5	8.5	0.9			
15	76	4.4	-4.3	-1.1	61	4.3	-3.8	-2.1	38	2.4	-1.5	-1.9	286	4.1	3.9	-1.1	263	11.6	11.5	1.5	258	12.4	12.1	2.5	254	5.5	5.3	1.5			
16	75	5.1	-4.9	-1.3	65	4.3	-3.9	-1.8	63	2.5	-2.2	-1.1	292	1.6	1.5	-0.6	270	12.0	12.0	0.0	240	12.6	10.9	6.4	247	4.4	4.1	1.7			
17	74	5.0	-4.8	-1.4	72	4.1	-3.9	-1.3	35	3.2	-1.8	-2.6	254	3.2	3.1	0.9	266	10.4	10.4	0.7	239	16.7	14.3	8.6	234	7.0	5.7	4.1			
18	63	3.8	-3.4	-1.7	57	4.4	-3.7	-2.4	36	2.2	-1.3	-1.8	288	1.6	1.5	-0.5	267	11.8	11.8	0.6	248	18.0	16.7	6.8	234	8.7	7.0	5.1			
19	67	5.0	-4.6	-2.0	61	5.2	-4.6	-2.5	27	1.3	-0.6	-1.2	273	4.0	4.0	-0.2	269	11.3	11.3	0.1	238	16.5	13.9	8.8	248	6.1	5.7	2.3			
20	83	4.7	-4.7	-0.6	60	5.6	-4.9	-2.8	48	2.5	-1.9	-1.7	295	4.7	4.2	-2.0	263	12.7	12.6	1.6	244	17.8	16.0	7.9	63	3.3	-2.9	-1.5			
21	80	3.9	-3.8	-0.7	60	5.6	-4.9	-2.8	44	3.7	-2.6	-2.7	314	4.2	3.0	-2.9	276	13.9	13.8	-1.4	256	15.6	15.2	3.7	281	6.5	6.4	-1.2			
22	68	3.2	-3.0	-1.2	56	5.0	-4.1	-2.8	18	3.3	-1.0	-3.1	310	4.3	3.3	-2.8	282	16.0	15.6	-3.4	263	21.3	21.1	2.6	270	2.8	2.8	0.0			
23	68	3.8	-3.5	-1.4	46	4.9	-3.5	-3.4	25	4.7	-2.0	-4.3	313	5.7	4.2	-3.9	280	14.3	14.1	-2.6	258	19.8	19.3	4.2	262	10.4	10.3	1.4			
24	67	3.3	-3.0	-1.3	65	3.8	-3.4	-1.6	354	2.0	0.2	-2.0	276	7.8	7.8	-0.8	277	14.0	13.9	-1.6	248	18.8	17.5	6.9	255	13.4	13.0	3.4			
25	102	3.4	-3.3	0.7	69	3.6	-3.4	-1.3	307	0.5	0.4	-0.3	299	7.4	6.5	-3.6	263	15.0	14.9	1.9	255	16.8	16.2	4.4	238	15.5	13.2	8.1			
26	66	3.0	-2.7	-1.2	51	2.6	-2.0	-1.6	350	2.2	0.4	-2.2	279	4.0	4.0	-0.6	270	14.4	14.4	-0.1	257	18.6	18.1	4.3	239	12.5	10.7	6.5			
27	81	4.3	-4.2	-0.7	73	3.8	-3.6	-1.1	14	0.8	-0.2	-0.8	269	5.1	5.1	0.1	267	13.7	13.7	0.7	257	16.2	15.8	3.7	260	11.2	11.0	2.0			
28	71	4.6	-4.3	-1.5	49	4.1	-3.1	-2.7	289	1.8	1.7	-0.6	277	7.2	7.1	-0.9	267	12.0	12.0	0.6	256	16.2	15.7	3.8	218	4.7	2.9	3.7			
29	81	5.1	-5.0	-0.8	22	4.8	-1.8	-4.5	335	1.7	0.7	-1.5	279	5.8	5.7	-0.9	266	19.2	19.2	1.3	263	21.7	21.5	2.8	264	11.9	11.8	1.2			
30	86	4.2	-4.2	-0.3	18	3.5	-1.1	-3.3	338	0.5	0.2	-0.5	279	7.0	6.9	-1.1	278	16.1	15.9	-2.2	248	25.3	23.5	9.4	246	6.2	5.7	2.5			
31	86	4.1	-4.1	-0.3	48	4.0	-3.0	-2.7	329	2.3	1.2	-2.0	271	6.4	6.4	-0.1	273	14.8	14.8	-0.8	258	18.9	18.5	3.9	237	9.5	8.0	5.1			

Daily Normals of Upper Air Winds (1971-2000)

MANGLORE

JANUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	3	1.9	-0.1	-1.9	89	4.4	-4.4	-0.1	65	3.8	-3.4	-1.6	14	0.4	-0.1	-0.4	257	7.7	7.5	1.8	249	10.1	9.4	3.7	130	2.5	-1.9	1.6
2	16	1.5	-0.4	-1.4	97	3.8	-3.8	0.5	94	1.6	-1.6	0.1	322	1.6	1.0	-1.3	257	7.4	7.2	1.7	243	9.5	8.5	4.3	227	2.5	1.8	1.7
3	36	1.4	-0.8	-1.1	83	4.6	-4.6	-0.6	90	2.4	-2.4	0.0	351	2.0	0.3	-2.0	265	7.1	7.1	0.6	237	11.4	9.6	6.2	225	2.1	1.5	1.5
4	41	0.9	-0.6	-0.7	93	4.2	-4.2	0.2	71	2.8	-2.6	-0.9	284	0.8	0.8	-0.2	241	6.4	5.6	3.1	234	8.6	6.9	5.1	250	4.5	4.2	1.5
5	352	1.4	0.2	-1.4	78	3.4	-3.3	-0.7	57	2.4	-2.0	-1.3	292	1.1	1.0	-0.4	262	7.6	7.5	1.0	260	10.1	9.9	1.8	254	3.3	3.2	0.9
6	36	1.9	-1.1	-1.5	85	4.7	-4.7	-0.4	69	1.9	-1.8	-0.7	299	1.0	0.9	-0.5	272	7.4	7.4	-0.2	242	12.5	11.0	5.9	261	5.4	5.3	0.8
7	20	1.2	-0.4	-1.1	82	4.3	-4.3	-0.6	52	1.1	-0.9	-0.7	14	0.8	-0.2	-0.8	258	8.9	8.7	1.9	257	13.7	13.4	3.0	253	5.6	5.4	1.6
8	318	1.5	1.0	-1.1	87	5.0	-5.0	-0.3	15	1.1	-0.3	-1.1	315	3.0	2.1	-2.1	262	8.8	8.7	1.2	257	10.0	9.7	2.3	72	1.3	-1.2	-0.4
9	18	1.9	-0.6	-1.8	96	3.8	-3.8	0.4	77	1.8	-1.8	-0.4	292	2.2	2.0	-0.8	269	11.0	11.0	0.2	255	11.7	11.3	3.0	243	1.8	1.6	0.8
10	4	1.5	-0.1	-1.5	106	4.5	-4.3	1.2	108	1.3	-1.2	0.4	248	3.5	3.3	1.3	265	10.8	10.8	1.0	261	11.7	11.6	1.8	265	3.5	3.5	0.3
11	324	1.4	0.8	-1.1	99	3.8	-3.8	0.6	259	0.5	0.5	0.1	300	3.6	3.1	-1.8	269	11.6	11.6	0.3	249	10.2	9.5	3.7	29	1.8	-0.9	-1.6
12	360	1.2	0.0	-1.2	85	3.3	-3.3	-0.3	326	0.4	0.2	-0.3	310	3.0	2.3	-1.9	266	9.9	9.9	0.7	258	9.8	9.6	2.1	318	2.7	1.8	-2.0
13	326	0.7	0.4	-0.6	90	4.1	-4.1	0.0	68	1.6	-1.5	-0.6	27	1.1	-0.5	-1.0	271	11.1	11.1	-0.1	256	10.3	10.0	2.5	270	1.7	1.7	0.0
14	288	0.9	0.9	-0.3	99	3.9	-3.9	0.6	88	2.5	-2.5	-0.1	279	1.9	1.9	-0.3	266	9.6	9.6	0.7	238	10.4	8.8	5.6	279	3.3	3.3	-0.5
15	355	1.2	0.1	-1.2	90	3.6	-3.6	0.0	115	2.1	-1.9	0.9	282	2.5	2.4	-0.5	277	11.4	11.3	-1.3	236	11.4	9.4	6.4	32	1.3	-0.7	-1.1
16	338	1.1	0.4	-1.0	98	6.1	-6.0	0.8	102	1.9	-1.9	0.4	265	2.2	2.2	0.2	270	8.2	8.2	0.0	250	8.4	7.9	2.8	256	1.2	1.2	0.3
17	339	1.9	0.7	-1.8	94	5.1	-5.1	0.4	103	3.1	-3.0	0.7	284	1.6	1.6	-0.4	258	7.7	7.5	1.6	256	9.6	9.3	2.4	186	2.7	0.3	2.7
18	8	2.2	-0.3	-2.2	84	4.7	-4.7	-0.5	108	2.5	-2.4	0.8	306	1.4	1.1	-0.8	250	7.7	7.3	2.6	233	8.8	7.0	5.3	135	1.3	-0.9	0.9
19	32	2.2	-1.2	-1.9	97	3.1	-3.1	0.4	64	3.2	-2.9	-1.4	321	1.9	1.2	-1.5	284	8.9	8.6	-2.1	262	11.2	11.1	1.5	283	0.9	0.9	-0.2
20	321	2.1	1.3	-1.6	93	4.1	-4.1	0.2	49	3.2	-2.4	-2.1	312	1.5	1.1	-1.0	266	8.5	8.5	0.6	262	10.3	10.2	1.4	270	0.9	0.9	0.0
21	347	3.1	0.7	-3.0	77	3.5	-3.4	-0.8	65	2.6	-2.4	-1.1	310	2.6	2.0	-1.7	263	7.7	7.6	1.0	250	9.0	8.5	3.1	263	2.4	2.4	0.3
22	350	1.7	0.3	-1.7	82	3.5	-3.5	-0.5	72	2.8	-2.7	-0.9	346	3.6	0.9	-3.5	268	8.5	8.5	0.3	240	8.5	7.3	4.3	155	1.9	-0.8	1.7
23	356	1.4	0.1	-1.4	85	3.7	-3.7	-0.3	87	3.9	-3.9	-0.2	344	4.1	1.1	-3.9	284	7.5	7.3	-1.8	243	6.2	5.5	2.8	275	1.1	1.1	-0.1
24	81	0.6	-0.6	-0.1	90	4.6	-4.6	0.0	74	4.8	-4.6	-1.3	346	1.2	0.3	-1.2	290	8.4	7.9	-2.9	246	7.8	7.1	3.2	162	3.5	-1.1	3.3
25	13	1.8	-0.4	-1.8	82	5.1	-5.1	-0.7	71	4.2	-4.0	-1.4	349	1.0	0.2	-1.0	293	8.9	8.2	-3.4	276	9.1	9.1	-0.9	306	4.1	3.3	-2.4
26	348	3.0	0.6	-2.9	83	4.9	-4.9	-0.6	79	2.5	-2.5	-0.5	40	1.6	-1.0	-1.2	281	7.2	7.1	-1.4	252	7.1	6.8	2.2	236	1.1	0.9	0.6
27	63	0.2	-0.2	-0.1	84	5.3	-5.3	-0.6	72	3.9	-3.7	-1.2	21	2.2	-0.8	-2.1	274	6.3	6.3	-0.4	251	6.2	5.9	2.0	187	0.8	0.1	0.8
28	330	2.2	1.1	-1.9	90	4.8	-4.8	0.0	57	5.0	-4.2	-2.7	18	0.9	-0.3	-0.9	286	7.4	7.1	-2.0	255	9.0	8.7	2.4	211	4.7	2.4	4.0
29	326	1.4	0.8	-1.2	81	4.9	-4.8	-0.8	78	5.0	-4.9	-1.0	25	1.9	-0.8	-1.7	274	8.0	8.0	-0.6	262	11.7	11.6	1.7	193	2.6	0.6	2.5
30	311	0.9	0.7	-0.6	92	3.4	-3.4	0.1	72	4.9	-4.7	-1.5	346	3.4	0.8	-3.3	260	7.8	7.7	1.4	254	6.9	6.6	1.9	196	1.5	0.4	1.4
31	323	0.5	0.3	-0.4	83	3.5	-3.5	-0.4	67	4.4	-4.1	-1.7	335	4.3	1.8	-3.9	269	10.0	10.0	0.1	264	9.9	9.8	1.1	266	6.5	6.5	0.4

Daily Normals of Upper Air Winds (1971-2000)

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MANGLORE

FEBRUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	311	2.9	2.2	-1.9	78	2.5	-2.4	-0.5	69	4.0	-3.7	-1.4	335	3.8	1.6	-3.4	278	8.8	8.7	-1.3	263	11.6	11.5	1.5	268	6.2	6.2	0.2			
2	306	2.4	1.9	-1.4	90	1.9	-1.9	0.0	82	4.4	-4.4	-0.6	331	2.1	1.0	-1.8	264	9.1	9.1	0.9	256	13.4	13.0	3.2	275	4.7	4.7	-0.4			
3	345	2.0	0.5	-1.9	74	2.9	-2.8	-0.8	93	2.1	-2.1	0.1	305	3.7	3.0	-2.1	273	10.3	10.3	-0.6	268	12.6	12.6	0.4	247	4.6	4.2	1.8			
4	291	2.2	2.1	-0.8	95	2.5	-2.5	0.2	71	2.8	-2.6	-0.9	312	4.7	3.5	-3.1	275	9.7	9.7	-0.9	280	11.7	11.5	-2.0	272	6.7	6.7	-0.2			
5	327	3.3	1.8	-2.8	85	2.5	-2.5	-0.2	53	3.1	-2.5	-1.9	298	4.1	3.6	-1.9	283	12.4	12.1	-2.7	266	12.1	12.1	0.9	307	2.6	2.1	-1.6			
6	311	2.0	1.5	-1.3	92	3.0	-3.0	0.1	65	3.3	-3.0	-1.4	306	4.2	3.4	-2.5	262	12.2	12.1	1.7	264	12.0	11.9	1.2	323	3.0	1.8	-2.4			
7	338	1.6	0.6	-1.5	84	2.8	-2.8	-0.3	32	1.9	-1.0	-1.6	305	3.7	3.0	-2.1	270	11.9	11.9	-0.1	272	10.6	10.6	-0.3	265	1.1	1.1	0.1			
8	309	2.7	2.1	-1.7	111	1.7	-1.6	0.6	28	1.7	-0.8	-1.5	318	5.2	3.5	-3.9	255	12.6	12.2	3.2	275	10.7	10.7	-0.9	282	1.4	1.4	-0.3			
9	318	2.5	1.7	-1.9	63	2.2	-2.0	-1.0	37	1.5	-0.9	-1.2	319	5.0	3.3	-3.8	275	10.6	10.6	-1.0	261	10.5	10.4	1.6	149	1.7	-0.9	1.5			
10	293	2.1	1.9	-0.8	90	2.3	-2.3	0.0	47	1.9	-1.4	-1.3	318	4.8	3.2	-3.6	284	11.6	11.3	-2.8	264	9.9	9.8	1.0	124	1.4	-1.2	0.8			
11	294	2.4	2.2	-1.0	92	3.2	-3.2	0.1	58	3.6	-3.0	-1.9	350	2.7	0.5	-2.7	285	8.3	8.0	-2.1	258	10.0	9.8	2.0	252	4.8	4.6	1.5			
12	274	2.6	2.6	-0.2	101	2.1	-2.1	0.4	63	4.2	-3.7	-1.9	4	2.9	-0.2	-2.9	282	7.8	7.6	-1.6	242	9.5	8.4	4.4	256	1.2	1.2	0.3			
13	288	2.6	2.5	-0.8	70	2.0	-1.9	-0.7	88	3.7	-3.7	-0.1	236	0.7	0.6	0.4	273	8.8	8.8	-0.4	238	10.4	8.8	5.5	222	3.0	2.0	2.2			
14	325	3.7	2.1	-3.0	107	2.4	-2.3	0.7	88	2.5	-2.5	-0.1	319	2.0	1.3	-1.5	262	6.8	6.7	0.9	222	9.1	6.1	6.8	326	1.8	1.0	-1.5			
15	295	2.9	2.6	-1.2	87	2.2	-2.2	-0.1	87	1.7	-1.7	-0.1	300	2.2	1.9	-1.1	265	9.6	9.6	0.8	246	9.3	8.5	3.8	138	2.4	-1.6	1.8			
16	321	3.2	2.0	-2.5	93	1.7	-1.7	0.1	108	0.9	-0.9	0.3	294	3.4	3.1	-1.4	258	8.4	8.2	1.7	241	6.5	5.7	3.2	309	2.2	1.7	-1.4			
17	309	2.6	2.0	-1.6	99	1.8	-1.8	0.3	104	2.1	-2.0	0.5	291	3.3	3.1	-1.2	254	8.1	7.8	2.2	226	9.2	6.6	6.4	171	1.9	-0.3	1.9			
18	293	2.5	2.3	-1.0	96	2.0	-2.0	0.2	108	1.9	-1.8	0.6	314	3.2	2.3	-2.2	253	7.8	7.5	2.3	231	10.0	7.8	6.3	198	2.3	0.7	2.2			
19	317	3.7	2.5	-2.7	119	2.3	-2.0	1.1	93	2.1	-2.1	0.1	333	3.1	1.4	-2.8	259	7.1	7.0	1.3	242	7.6	6.7	3.5	264	2.7	2.7	0.3			
20	293	3.3	3.0	-1.3	94	3.0	-3.0	0.2	73	3.7	-3.5	-1.1	348	3.0	0.6	-2.9	266	5.4	5.4	0.4	238	9.1	7.7	4.9	251	3.4	3.2	1.1			
21	308	3.1	2.4	-1.9	72	2.2	-2.1	-0.7	80	3.6	-3.5	-0.6	328	2.2	1.2	-1.9	266	5.6	5.6	0.4	255	9.8	9.4	2.6	272	3.4	3.4	-0.1			
22	313	2.1	1.5	-1.4	78	2.9	-2.8	-0.6	69	3.9	-3.6	-1.4	351	3.1	0.5	-3.1	270	10.0	10.0	0.0	259	9.6	9.4	1.8	270	1.8	1.8	0.0			
23	295	3.3	3.0	-1.4	97	2.3	-2.3	0.3	69	4.8	-4.5	-1.7	355	2.1	0.2	-2.1	271	7.9	7.9	-0.1	267	9.0	9.0	0.4	284	3.0	2.9	-0.7			
24	319	2.1	1.4	-1.6	72	2.6	-2.5	-0.8	79	5.7	-5.6	-1.1	329	1.2	0.6	-1.0	263	8.6	8.5	1.1	266	10.4	10.4	0.8	337	3.3	1.3	-3.0			
25	293	2.1	1.9	-0.8	82	2.1	-2.1	-0.3	89	6.0	-6.0	-0.1	335	2.6	1.1	-2.4	261	9.4	9.3	1.4	281	7.7	7.6	-1.5	318	1.5	1.0	-1.1			
26	321	2.7	1.7	-2.1	73	2.7	-2.6	-0.8	79	6.0	-5.9	-1.2	312	1.5	1.1	-1.0	270	8.9	8.9	0.0	269	8.7	8.7	0.1	263	3.5	3.5	0.4			
27	305	3.8	3.1	-2.2	43	2.2	-1.5	-1.6	82	5.9	-5.8	-0.8	325	2.8	1.6	-2.3	269	10.6	10.6	0.1	272	10.4	10.4	-0.3	281	3.1	3.0	-0.6			
28	315	4.1	2.9	-2.9	60	3.0	-2.6	-1.5	77	7.6	-7.4	-1.7	339	2.6	0.9	-2.4	278	8.1	8.0	-1.1	284	9.0	8.7	-2.2	243	2.7	2.4	1.2			
29	310	2.6	2.0	-1.7	56	3.7	-3.1	-2.1	92	7.3	-7.3	0.3	335	2.3	1.0	-2.1	229	8.0	6.0	5.3	226	14.2	10.3	9.8	248	8.9	8.3	3.3			

Daily Normals of Upper Air Winds (1971-2000)

231

MANGLORE

MARCH

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	311	3.3	2.5	-2.2	48	2.7	-2.0	-1.8	83	6.8	-6.8	-0.8	360	3.0	0.0	-3.0	286	8.2	7.9	-2.2	247	9.1	8.4	3.6	215	1.2	0.7	1.0			
2	291	3.1	2.9	-1.1	63	1.8	-1.6	-0.8	85	5.9	-5.9	-0.5	4	1.6	-0.1	-1.6	293	6.2	5.7	-2.4	256	8.1	7.9	1.9	223	3.3	2.2	2.4			
3	302	3.4	2.9	-1.8	52	2.4	-1.9	-1.5	88	6.2	-6.2	-0.2	11	3.6	-0.7	-3.5	286	6.1	5.9	-1.7	250	9.0	8.4	3.1	215	1.6	0.9	1.3			
4	286	2.6	2.5	-0.7	62	2.1	-1.9	-1.0	81	7.4	-7.3	-1.1	5	2.2	-0.2	-2.2	285	7.0	6.8	-1.8	255	8.9	8.6	2.3	135	3.1	-2.2	2.2			
5	306	5.2	4.2	-3.1	54	2.2	-1.8	-1.3	90	7.5	-7.5	0.0	352	1.5	0.2	-1.5	261	8.9	8.8	1.4	263	13.0	12.9	1.5	232	2.9	2.3	1.8			
6	295	3.1	2.8	-1.3	42	1.3	-0.9	-1.0	93	7.3	-7.3	0.4	39	1.4	-0.9	-1.1	264	8.0	8.0	0.8	266	8.1	8.1	0.6	258	3.8	3.7	0.8			
7	312	2.5	1.9	-1.7	58	1.3	-1.1	-0.7	92	5.4	-5.4	0.2	351	0.6	0.1	-0.6	280	7.8	7.7	-1.4	258	9.7	9.5	2.0	317	3.3	2.2	-2.4			
8	271	4.7	4.7	-0.1	37	0.5	-0.3	-0.4	87	6.1	-6.1	-0.3	348	1.4	0.3	-1.4	276	8.1	8.1	-0.8	267	8.8	8.8	0.5	275	2.3	2.3	-0.2			
9	315	4.2	3.0	-3.0	36	1.9	-1.1	-1.5	84	6.9	-6.9	-0.7	34	2.2	-1.2	-1.8	267	10.1	10.1	0.6	270	9.2	9.2	0.0	284	0.4	0.4	-0.1			
10	314	2.9	2.1	-2.0	62	2.1	-1.9	-1.0	89	5.5	-5.5	-0.1	333	1.1	0.5	-1.0	270	7.5	7.5	0.0	262	7.5	7.4	1.0	273	1.9	1.9	-0.1			
11	311	3.2	2.4	-2.1	79	1.6	-1.6	-0.3	87	6.3	-6.3	-0.3	5	1.2	-0.1	-1.2	289	7.4	7.0	-2.4	269	13.4	13.4	0.2	164	2.5	-0.7	2.4			
12	302	4.1	3.5	-2.2	34	2.2	-1.2	-1.8	91	5.7	-5.7	0.1	288	2.8	2.7	-0.9	278	9.5	9.4	-1.3	281	11.2	11.0	-2.1	260	2.2	2.2	0.4			
13	310	5.2	4.0	-3.4	63	1.1	-1.0	-0.5	80	5.6	-5.5	-1.0	342	4.3	1.3	-4.1	290	9.1	8.6	-3.1	276	7.1	7.1	-0.7	269	4.3	4.3	0.1			
14	321	4.6	2.9	-3.6	77	1.8	-1.8	-0.4	85	7.5	-7.5	-0.6	36	2.7	-1.6	-2.2	287	7.2	6.9	-2.1	269	9.9	9.9	0.1	216	0.9	0.5	0.7			
15	306	3.4	2.8	-2.0	61	1.8	-1.6	-0.9	82	7.6	-7.5	-1.1	48	4.3	-3.2	-2.9	288	5.2	4.9	-1.6	264	6.6	6.6	0.7	102	2.4	-2.3	0.5			
16	273	3.5	3.5	-0.2	49	1.8	-1.4	-1.2	86	8.3	-8.3	-0.6	66	3.0	-2.7	-1.2	262	8.3	8.2	1.2	261	12.0	11.9	1.8	254	2.9	2.8	0.8			
17	304	3.7	3.1	-2.1	29	1.0	-0.5	-0.9	89	8.4	-8.4	-0.1	19	2.4	-0.8	-2.3	273	6.3	6.3	-0.3	243	9.4	8.4	4.2	205	3.1	1.3	2.8			
18	325	3.9	2.2	-3.2	45	1.1	-0.8	-0.8	92	6.9	-6.9	0.3	9	1.3	-0.2	-1.3	282	5.0	4.9	-1.0	254	10.3	9.9	2.8	248	1.6	1.5	0.6			
19	309	3.3	2.6	-2.1	45	1.3	-0.9	-0.9	89	9.3	-9.3	-0.2	21	3.3	-1.2	-3.1	258	7.1	6.9	1.5	251	8.4	8.0	2.7	217	3.6	2.2	2.9			
20	294	3.2	2.9	-1.3	50	1.7	-1.3	-1.1	85	8.2	-8.2	-0.7	36	1.7	-1.0	-1.4	272	7.7	7.7	-0.3	271	9.6	9.6	-0.1	315	0.3	0.2	-0.2			
21	285	2.8	2.7	-0.7	18	1.3	-0.4	-1.2	85	7.4	-7.4	-0.6	63	3.5	-3.1	-1.6	280	5.5	5.4	-1.0	250	6.8	6.4	2.3	123	3.0	-2.5	1.6			
22	286	2.6	2.5	-0.7	25	2.9	-1.2	-2.6	79	8.4	-8.2	-1.6	57	2.0	-1.7	-1.1	255	9.3	9.0	2.4	249	9.7	9.0	3.5	230	1.7	1.3	1.1			
23	287	3.4	3.2	-1.0	11	3.1	-0.6	-3.0	85	8.1	-8.1	-0.7	27	2.0	-0.9	-1.8	267	9.1	9.1	0.4	255	10.5	10.1	2.8	232	4.2	3.3	2.6			
24	279	3.8	3.8	-0.6	9	3.0	-0.5	-3.0	86	5.8	-5.8	-0.4	270	2.1	2.1	0.0	256	11.1	10.8	2.7	250	10.0	9.4	3.5	333	3.3	1.5	-2.9			
25	297	2.9	2.6	-1.3	35	2.1	-1.2	-1.7	88	6.9	-6.9	-0.3	47	2.1	-1.5	-1.4	277	11.7	11.6	-1.4	257	11.6	11.3	2.7	285	4.2	4.1	-1.1			
26	278	3.0	3.0	-0.4	21	1.9	-0.7	-1.8	80	7.1	-7.0	-1.2	25	2.3	-1.0	-2.1	264	10.9	10.8	1.1	265	15.7	15.6	1.4	288	4.6	4.4	-1.4			
27	277	4.0	4.0	-0.5	6	1.8	-0.2	-1.8	89	7.8	-7.8	-0.2	42	4.2	-2.8	-3.1	277	9.9	9.8	-1.2	264	10.2	10.1	1.1	132	1.5	-1.1	1.0			
28	310	3.3	2.5	-2.1	34	2.3	-1.3	-1.9	90	7.1	-7.1	0.0	42	4.5	-3.0	-3.3	300	9.4	8.1	-4.7	267	10.3	10.3	0.6	273	7.1	7.1	-0.4			
29	307	3.8	3.0	-2.3	22	2.2	-0.8	-2.0	92	7.1	-7.1	0.2	36	1.9	-1.1	-1.5	302	8.6	7.3	-4.6	258	9.4	9.2	2.0	283	4.0	3.9	-0.9			
30	290	4.4	4.1	-1.5	11	1.5	-0.3	-1.5	86	7.7	-7.7	-0.6	50	3.0	-2.3	-1.9	275	4.4	4.4	-0.4	267	10.8	10.8	0.6	307	3.8	3.0	-2.3			
31	315	5.2	3.7	-3.7	7	2.5	-0.3	-2.5	89	8.6	-8.6	-0.2	38	4.2	-2.6	-3.3	261	6.5	6.4	1.0	263	10.3	10.2	1.2	293	2.8	2.6	-1.1			

Daily Normals of Upper Air Winds (1971-2000)

MANGLORE

APRIL

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	300	3.6	3.1	-1.8	8	2.7	-0.4	-2.7	80	6.5	-6.4	-1.1	76	4.2	-4.1	-1.0	252	6.6	6.3	2.1	248	8.5	7.9	3.2	290	3.2	3.0	-1.1			
2	275	3.2	3.2	-0.3	40	1.7	-1.1	-1.3	88	8.5	-8.5	-0.3	352	0.7	0.1	-0.7	266	6.2	6.2	0.4	243	7.6	6.8	3.5	180	0.5	0.0	0.5			
3	278	2.8	2.8	-0.4	36	1.7	-1.0	-1.4	93	7.8	-7.8	0.4	121	1.7	-1.5	0.9	261	8.5	8.4	1.4	243	8.9	7.9	4.0	268	2.9	2.9	0.1			
4	298	3.0	2.6	-1.4	32	2.5	-1.3	-2.1	89	7.8	-7.8	-0.2	302	0.9	0.8	-0.5	267	7.4	7.4	0.4	251	8.8	8.3	2.9	221	1.8	1.2	1.4			
5	291	3.3	3.1	-1.2	27	2.2	-1.0	-2.0	91	8.0	-8.0	0.2	347	1.8	0.4	-1.8	279	8.1	8.0	-1.2	236	9.9	8.2	5.5	173	2.3	-0.3	2.3			
6	291	4.2	3.9	-1.5	28	2.6	-1.2	-2.3	88	8.8	-8.8	-0.3	17	1.0	-0.3	-1.0	288	8.9	8.5	-2.7	264	9.9	9.8	1.0	166	2.9	-0.7	2.8			
7	294	3.5	3.2	-1.4	54	1.7	-1.4	-1.0	83	7.7	-7.6	-1.0	51	1.3	-1.0	-0.8	275	6.2	6.2	-0.5	248	8.5	7.9	3.2	99	1.2	-1.2	0.2			
8	304	3.6	3.0	-2.0	17	2.7	-0.8	-2.6	85	6.0	-6.0	-0.5	76	1.2	-1.2	-0.3	267	6.0	6.0	0.3	247	7.1	6.5	2.8	181	4.1	0.1	4.1			
9	301	3.3	2.8	-1.7	23	3.0	-1.2	-2.8	87	7.4	-7.4	-0.4	73	1.4	-1.3	-0.4	274	5.9	5.9	-0.4	260	7.8	7.7	1.3	273	1.7	1.7	-0.1			
10	299	2.6	2.3	-1.3	14	2.1	-0.5	-2.0	87	6.2	-6.2	-0.3	61	2.6	-2.3	-1.3	284	5.0	4.9	-1.2	256	8.5	8.3	2.0	189	3.0	0.5	3.0			
11	272	3.4	3.4	-0.1	23	2.1	-0.8	-1.9	83	6.6	-6.6	-0.8	95	2.4	-2.4	0.2	260	2.7	2.7	0.5	252	6.9	6.6	2.1	156	1.2	-0.5	1.1			
12	282	2.5	2.4	-0.5	4	1.5	-0.1	-1.5	95	5.6	-5.6	0.5	75	2.8	-2.7	-0.7	234	1.7	1.4	1.0	212	7.0	3.7	6.0	152	4.1	-1.9	3.6			
13	278	5.0	5.0	-0.7	354	1.8	0.2	-1.8	87	7.2	-7.2	-0.4	97	3.1	-3.1	0.4	239	4.9	4.2	2.5	223	6.7	4.6	4.9	211	1.7	0.9	1.5			
14	302	3.8	3.2	-2.0	18	2.0	-0.6	-1.9	91	7.0	-7.0	0.1	103	1.7	-1.7	0.4	239	5.1	4.4	2.6	245	9.0	8.2	3.8	215	2.1	1.2	1.7			
15	330	2.8	1.4	-2.4	360	1.7	0.0	-1.7	87	5.6	-5.6	-0.3	27	0.4	-0.2	-0.4	256	10.0	9.7	2.5	248	12.6	11.7	4.8	206	3.4	1.5	3.1			
16	297	4.9	4.4	-2.2	3	2.1	-0.1	-2.1	88	5.4	-5.4	-0.2	83	1.6	-1.6	-0.2	274	8.4	8.4	-0.6	250	12.9	12.1	4.4	344	0.7	0.2	-0.7			
17	303	5.3	4.4	-2.9	13	2.2	-0.5	-2.1	87	5.8	-5.8	-0.3	28	1.9	-0.9	-1.7	261	10.7	10.6	1.6	251	13.3	12.6	4.4	201	1.7	0.6	1.6			
18	315	3.7	2.6	-2.6	23	2.6	-1.0	-2.4	84	6.7	-6.7	-0.7	63	1.3	-1.2	-0.6	264	9.1	9.1	0.9	242	12.3	10.9	5.7	140	0.8	-0.5	0.6			
19	302	3.6	3.0	-1.9	26	2.8	-1.2	-2.5	84	8.1	-8.0	-0.9	108	1.6	-1.5	0.5	257	9.2	9.0	2.0	230	14.1	10.8	9.0	114	3.5	-3.2	1.4			
20	323	5.5	3.3	-4.4	5	2.1	-0.2	-2.1	90	7.1	-7.1	0.0	90	1.1	-1.1	0.0	262	9.7	9.6	1.3	247	13.1	12.1	5.1	129	2.6	-2.0	1.6			
21	298	4.5	4.0	-2.1	11	1.6	-0.3	-1.6	88	6.5	-6.5	-0.2	96	1.0	-1.0	0.1	279	7.7	7.6	-1.2	247	12.9	11.8	5.1	72	0.9	-0.9	-0.3			
22	294	3.9	3.6	-1.6	13	3.1	-0.7	-3.0	88	6.8	-6.8	-0.2	356	1.3	0.1	-1.3	262	7.6	7.5	1.0	257	11.7	11.4	2.6	287	3.0	2.9	-0.9			
23	326	3.2	1.8	-2.7	15	2.3	-0.6	-2.2	87	5.8	-5.8	-0.3	317	2.3	1.6	-1.7	260	7.6	7.5	1.3	255	11.6	11.2	3.1	92	3.6	-3.6	0.1			
24	310	4.2	3.2	-2.7	11	1.6	-0.3	-1.6	81	5.8	-5.7	-0.9	357	3.8	0.2	-3.8	262	6.9	6.8	1.0	263	11.5	11.4	1.5	184	1.3	0.1	1.3			
25	313	4.8	3.5	-3.3	20	1.5	-0.5	-1.4	78	5.4	-5.3	-1.1	356	3.1	0.2	-3.1	281	6.8	6.7	-1.3	260	8.0	7.9	1.4	93	4.3	-4.3	0.2			
26	308	4.9	3.9	-3.0	358	2.7	0.1	-2.7	81	5.8	-5.7	-0.9	24	2.0	-0.8	-1.8	288	6.0	5.7	-1.9	246	6.8	6.2	2.8	100	4.8	-4.7	0.8			
27	305	5.1	4.2	-2.9	10	2.8	-0.5	-2.8	73	5.7	-5.4	-1.7	355	3.3	0.3	-3.3	309	4.4	3.4	-2.8	251	9.7	9.2	3.1	82	4.9	-4.8	-0.7			
28	300	4.4	3.8	-2.2	344	2.2	0.6	-2.1	76	6.3	-6.1	-1.5	46	3.7	-2.7	-2.6	279	5.9	5.8	-0.9	241	8.0	7.0	3.9	118	3.4	-3.0	1.6			
29	316	6.9	4.8	-4.9	342	2.3	0.7	-2.2	66	6.4	-5.8	-2.6	30	2.0	-1.0	-1.7	319	5.7	3.8	-4.3	253	6.4	6.1	1.9	132	4.8	-3.6	3.2			
30	328	4.4	2.3	-3.7	11	2.6	-0.5	-2.6	65	5.0	-4.5	-2.1	30	3.0	-1.5	-2.6	278	4.3	4.3	-0.6	240	6.1	5.3	3.1	98	4.9	-4.9	0.7			

Daily Normals of Upper Air Winds (1971-2000)

MANGLORE

MAY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	304	3.7	3.1	-2.1	12	1.9	-0.4	-1.9	56	4.3	-3.6	-2.4	50	3.0	-2.3	-1.9	274	3.0	3.0	-0.2	218	5.5	3.4	4.3	127	5.8	-4.6	3.5			
2	310	4.5	3.4	-2.9	21	3.1	-1.1	-2.9	77	4.5	-4.4	-1.0	45	2.5	-1.8	-1.8	272	2.9	2.9	-0.1	208	4.9	2.3	4.3	100	4.2	-4.1	0.7			
3	315	4.8	3.4	-3.4	9	1.9	-0.3	-1.9	78	4.3	-4.2	-0.9	63	1.8	-1.6	-0.8	229	4.0	3.0	2.6	214	7.2	4.0	6.0	134	5.5	-4.0	3.8			
4	311	5.2	3.9	-3.4	2	2.9	-0.1	-2.9	78	4.8	-4.7	-1.0	59	1.7	-1.5	-0.9	253	3.7	3.5	1.1	215	6.8	3.9	5.6	139	3.8	-2.5	2.9			
5	315	5.1	3.6	-3.6	360	3.1	0.0	-3.1	86	5.3	-5.3	-0.4	33	2.0	-1.1	-1.7	254	2.2	2.1	0.6	224	4.6	3.2	3.3	107	6.6	-6.3	1.9			
6	299	5.2	4.6	-2.5	348	1.9	0.4	-1.9	75	4.2	-4.1	-1.1	45	2.0	-1.4	-1.4	270	3.2	3.2	0.0	215	5.0	2.9	4.1	105	7.5	-7.3	1.9			
7	287	4.5	4.3	-1.3	3	2.2	-0.1	-2.2	94	6.3	-6.3	0.4	69	3.4	-3.2	-1.2	208	1.7	0.8	1.5	181	5.3	0.1	5.3	93	8.9	-8.9	0.5			
8	311	4.8	3.6	-3.1	360	2.3	0.0	-2.3	83	6.4	-6.3	-0.8	83	3.3	-3.3	-0.4	259	0.5	0.5	0.1	217	1.5	0.9	1.2	109	8.8	-8.3	2.9			
9	302	5.8	4.9	-3.1	342	2.2	0.7	-2.1	74	5.1	-4.9	-1.4	55	2.9	-2.4	-1.7	297	0.2	0.2	-0.1	147	2.0	-1.1	1.7	101	9.3	-9.1	1.8			
10	309	4.5	3.5	-2.8	344	2.6	0.7	-2.5	71	5.0	-4.7	-1.6	50	3.0	-2.3	-1.9	162	0.9	-0.3	0.9	172	2.9	-0.4	2.9	92	9.5	-9.5	0.4			
11	293	4.9	4.5	-1.9	360	2.1	0.0	-2.1	72	4.6	-4.4	-1.4	48	2.7	-2.0	-1.8	233	1.5	1.2	0.9	163	3.4	-1.0	3.2	113	12.2	-11.3	4.7			
12	305	3.7	3.0	-2.1	4	2.7	-0.2	-2.7	83	4.6	-4.6	-0.6	74	3.5	-3.4	-1.0	153	0.2	-0.1	0.2	151	5.2	-2.5	4.6	118	12.7	-11.3	5.9			
13	317	4.8	3.3	-3.5	342	2.2	0.7	-2.1	66	4.5	-4.1	-1.8	57	3.7	-3.1	-2.0	180	1.7	0.0	1.7	173	4.1	-0.5	4.1	112	9.2	-8.6	3.4			
14	261	4.3	4.2	0.7	342	1.6	0.5	-1.5	81	4.4	-4.3	-0.7	62	3.0	-2.6	-1.4	127	1.5	-1.2	0.9	165	4.9	-1.3	4.7	114	12.1	-11.1	4.9			
15	285	4.6	4.4	-1.2	315	1.7	1.2	-1.2	78	3.4	-3.3	-0.7	92	3.6	-3.6	0.1	146	2.3	-1.3	1.9	153	4.0	-1.8	3.6	95	12.9	-12.8	1.2			
16	256	4.2	4.1	1.0	317	1.6	1.1	-1.2	85	3.3	-3.3	-0.3	82	2.9	-2.9	-0.4	135	2.0	-1.4	1.4	132	7.1	-5.3	4.7	108	8.6	-8.2	2.7			
17	281	4.1	4.0	-0.8	306	1.7	1.4	-1.0	78	3.8	-3.7	-0.8	98	1.4	-1.4	0.2	158	2.2	-0.8	2.0	156	4.3	-1.7	3.9	116	9.9	-8.9	4.3			
18	283	5.0	4.9	-1.1	322	2.4	1.5	-1.9	38	2.9	-1.8	-2.3	358	3.2	0.1	-3.2	87	2.2	-2.2	-0.1	137	4.1	-2.8	3.0	102	9.2	-9.0	1.9			
19	299	5.3	4.6	-2.6	318	3.0	2.0	-2.2	27	2.8	-1.3	-2.5	30	4.3	-2.1	-3.7	76	1.6	-1.6	-0.4	139	6.2	-4.1	4.7	103	12.0	-11.7	2.6			
20	304	6.5	5.4	-3.7	337	3.6	1.4	-3.3	25	2.6	-1.1	-2.4	52	4.1	-3.2	-2.5	180	1.7	0.0	1.7	165	4.8	-1.2	4.6	118	11.0	-9.7	5.2			
21	310	5.6	4.3	-3.6	322	3.4	2.1	-2.7	55	1.9	-1.6	-1.1	76	3.0	-2.9	-0.7	221	1.8	1.2	1.4	173	4.3	-0.5	4.3	102	11.0	-10.8	2.2			
22	296	5.2	4.7	-2.3	321	3.3	2.1	-2.6	61	2.5	-2.2	-1.2	41	2.1	-1.4	-1.6	254	1.8	1.7	0.5	127	3.8	-3.0	2.3	105	14.5	-14.0	3.7			
23	297	5.4	4.8	-2.4	336	3.2	1.3	-2.9	118	1.5	-1.3	0.7	4	1.3	-0.1	-1.3	342	1.9	0.6	-1.8	137	4.5	-3.1	3.3	97	14.3	-14.2	1.7			
24	306	7.0	5.7	-4.1	314	3.2	2.3	-2.2	60	2.0	-1.7	-1.0	45	3.7	-2.6	-2.6	158	0.5	-0.2	0.5	150	5.1	-2.5	4.4	101	14.0	-13.7	2.7			
25	291	5.5	5.1	-2.0	328	3.2	1.7	-2.7	55	2.4	-2.0	-1.4	40	2.6	-1.7	-2.0	90	0.7	-0.7	0.0	124	5.9	-4.9	3.3	99	11.6	-11.4	1.9			
26	302	4.9	4.2	-2.6	328	2.8	1.5	-2.4	60	2.8	-2.4	-1.4	50	4.2	-3.2	-2.7	118	1.9	-1.7	0.9	130	5.2	-4.0	3.3	105	16.0	-15.5	4.1			
27	295	4.5	4.1	-1.9	336	3.5	1.4	-3.2	74	2.5	-2.4	-0.7	63	2.0	-1.8	-0.9	129	2.6	-2.0	1.6	116	4.8	-4.3	2.1	108	15.2	-14.5	4.7			
28	307	4.6	3.7	-2.8	314	3.3	2.4	-2.3	43	1.8	-1.2	-1.3	45	0.7	-0.5	-0.5	112	2.4	-2.2	0.9	115	4.1	-3.7	1.7	108	16.8	-15.9	5.3			
29	302	4.1	3.5	-2.2	318	2.8	1.9	-2.1	81	1.2	-1.2	-0.2	16	1.9	-0.5	-1.8	145	1.2	-0.7	1.0	117	5.3	-4.7	2.4	107	16.7	-16.0	4.9			
30	290	4.4	4.1	-1.5	313	3.7	2.7	-2.5	353	0.8	0.1	-0.8	100	1.1	-1.1	0.2	98	3.5	-3.5	0.5	107	5.6	-5.4	1.6	107	17.1	-16.4	4.9			
31	296	4.9	4.4	-2.1	286	3.7	3.6	-1.0	270	0.4	0.4	0.0	217	1.0	0.6	0.8	125	2.8	-2.3	1.6	129	6.9	-5.4	4.3	106	18.2	-17.5	5.0			

Daily Normals of Upper Air Winds (1971-2000)

MANGLORE

JUNE

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	307	5.0	4.0	-3.0	286	4.6	4.4	-1.3	240	0.8	0.7	0.4	212	1.5	0.8	1.3	117	2.8	-2.5	1.3	102	7.2	-7.0	1.5	111	20.6	-19.2	7.4
2	300	4.4	3.8	-2.2	294	4.7	4.3	-1.9	270	1.1	1.1	0.0	245	1.7	1.5	0.7	134	2.8	-2.0	1.9	116	7.6	-6.9	3.3	108	20.8	-19.8	6.4
3	295	3.8	3.5	-1.6	287	5.1	4.9	-1.5	270	2.2	2.2	0.0	259	1.0	1.0	0.2	120	5.0	-4.3	2.5	105	9.5	-9.2	2.5	104	23.4	-22.7	5.6
4	239	4.9	4.2	2.5	281	5.1	5.0	-1.0	299	1.8	1.6	-0.9	34	1.1	-0.6	-0.9	118	4.2	-3.7	2.0	114	9.1	-8.3	3.7	99	24.5	-24.2	4.0
5	234	5.4	4.4	3.2	270	4.8	4.8	0.0	290	2.0	1.9	-0.7	207	0.7	0.3	0.6	107	5.7	-5.4	1.7	95	10.4	-10.4	1.0	102	23.1	-22.6	4.7
6	290	2.9	2.7	-1.0	276	5.7	5.7	-0.6	265	3.3	3.3	0.3	264	1.0	1.0	0.1	92	5.4	-5.4	0.2	97	11.5	-11.4	1.4	100	23.8	-23.4	4.2
7	287	5.1	4.9	-1.5	274	6.7	6.7	-0.5	277	3.2	3.2	-0.4	299	1.3	1.1	-0.6	96	6.3	-6.3	0.7	108	13.3	-12.7	4.1	94	22.8	-22.7	1.7
8	290	7.7	7.2	-2.6	281	7.1	7.0	-1.3	293	3.0	2.8	-1.2	297	0.7	0.6	-0.3	99	5.2	-5.1	0.8	104	13.4	-13.0	3.2	103	24.4	-23.8	5.3
9	259	7.8	7.7	1.5	275	7.7	7.7	-0.7	264	5.5	5.5	0.6	229	3.2	2.4	2.1	99	5.7	-5.6	0.9	92	12.7	-12.7	0.4	103	26.7	-26.0	6.0
10	221	5.3	3.5	4.0	275	7.9	7.9	-0.7	269	6.8	6.8	0.1	191	1.0	0.2	1.0	104	7.1	-6.9	1.7	101	14.7	-14.4	2.9	100	23.4	-23.1	4.0
11	244	4.1	3.7	1.8	287	7.6	7.3	-2.2	299	4.6	4.0	-2.2	27	0.2	-0.1	-0.2	79	5.4	-5.3	-1.0	101	11.9	-11.7	2.2	100	23.9	-23.5	4.3
12	272	6.9	6.9	-0.3	287	7.8	7.5	-2.3	288	6.1	5.8	-1.9	328	3.4	1.8	-2.9	97	5.1	-5.1	0.6	93	12.5	-12.5	0.7	103	26.2	-25.5	5.8
13	274	7.7	7.7	-0.6	295	7.3	6.6	-3.1	290	5.8	5.4	-2.0	289	2.4	2.3	-0.8	79	5.2	-5.1	-1.0	95	13.9	-13.8	1.2	99	27.5	-27.1	4.4
14	261	7.4	7.3	1.2	281	7.6	7.5	-1.4	271	6.5	6.5	-0.1	268	3.0	3.0	0.1	82	5.3	-5.3	-0.7	84	12.9	-12.8	-1.4	104	28.4	-27.6	6.7
15	265	7.0	7.0	0.6	276	9.1	9.1	-0.9	272	8.7	8.7	-0.3	244	5.2	4.7	2.3	81	4.7	-4.6	-0.7	93	13.2	-13.2	0.8	89	26.7	-26.7	-0.6
16	277	7.8	7.7	-0.9	280	9.0	8.9	-1.5	272	10.4	10.4	-0.4	259	6.1	6.0	1.2	87	3.4	-3.4	-0.2	85	16.5	-16.4	-1.3	100	29.2	-28.8	4.9
17	268	7.2	7.2	0.3	282	10.3	10.1	-2.2	279	11.1	11.0	-1.7	263	7.1	7.0	0.9	65	5.2	-4.7	-2.2	93	18.0	-18.0	1.0	96	30.4	-30.2	3.1
18	265	8.6	8.6	0.8	285	11.4	11.0	-3.0	274	10.2	10.2	-0.8	270	9.0	9.0	0.0	24	3.0	-1.2	-2.7	92	15.4	-15.4	0.6	97	27.4	-27.2	3.4
19	256	9.4	9.1	2.3	278	13.2	13.1	-1.9	281	12.6	12.4	-2.4	281	6.5	6.4	-1.2	89	8.0	-8.0	-0.1	94	18.2	-18.2	1.3	100	29.0	-28.6	4.9
20	262	6.9	6.8	1.0	292	11.3	10.4	-4.3	285	10.9	10.5	-2.9	283	7.3	7.1	-1.6	85	2.1	-2.1	-0.2	94	20.8	-20.7	1.6	93	28.3	-28.3	1.5
21	276	10.1	10.1	-1.0	287	11.0	10.5	-3.2	284	11.3	11.0	-2.7	294	6.4	5.8	-2.6	58	3.8	-3.2	-2.0	92	15.1	-15.1	0.6	95	25.3	-25.2	2.2
22	271	10.7	10.7	-0.2	285	11.0	10.6	-2.8	280	10.8	10.6	-1.9	278	6.1	6.0	-0.8	68	7.9	-7.3	-2.9	95	19.1	-19.0	1.7	94	32.2	-32.1	2.1
23	278	6.7	6.6	-0.9	283	10.8	10.5	-2.5	280	10.5	10.3	-1.8	284	6.7	6.5	-1.6	74	5.0	-4.8	-1.4	97	19.7	-19.6	2.4	92	33.3	-33.3	1.4
24	275	8.5	8.5	-0.8	280	9.9	9.8	-1.7	278	10.4	10.3	-1.5	263	6.2	6.1	0.8	110	5.6	-5.3	1.9	99	20.0	-19.8	3.1	99	28.1	-27.8	4.3
25	280	8.6	8.5	-1.5	284	10.1	9.8	-2.5	276	10.7	10.6	-1.2	273	6.6	6.6	-0.4	80	5.0	-4.9	-0.9	85	19.0	-18.9	-1.7	99	33.4	-33.0	5.3
26	284	8.3	8.1	-2.0	283	11.6	11.3	-2.6	284	11.1	10.8	-2.6	275	5.9	5.9	-0.5	85	5.0	-5.0	-0.4	94	18.6	-18.6	1.3	100	31.9	-31.4	5.4
27	272	7.2	7.2	-0.3	279	11.7	11.5	-1.9	285	11.2	10.8	-2.9	265	7.3	7.3	0.6	109	6.9	-6.5	2.3	90	20.4	-20.4	0.0	97	32.3	-32.0	4.2
28	278	9.8	9.7	-1.3	282	10.4	10.2	-2.2	283	10.9	10.6	-2.5	277	4.1	4.1	-0.5	96	7.1	-7.1	0.8	90	19.6	-19.6	0.1	94	29.4	-29.3	1.8
29	292	7.4	6.9	-2.8	288	10.8	10.3	-3.4	285	9.9	9.6	-2.6	271	5.0	5.0	-0.1	100	8.3	-8.2	1.4	97	20.3	-20.1	2.6	91	31.1	-31.1	0.5
30	290	9.1	8.6	-3.1	286	10.1	9.7	-2.8	285	8.6	8.3	-2.3	249	4.4	4.1	1.6	91	6.7	-6.7	0.1	95	19.8	-19.7	1.8	92	34.7	-34.7	1.2

Daily Normals of Upper Air Winds (1971-2000)

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MANGLORE

JULY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	284	6.5	6.3	-1.6	289	10.4	9.8	-3.4	287	8.8	8.4	-2.6	287	5.5	5.3	-1.6	89	6.2	-6.2	-0.1	94	21.1	-21.1	1.4	99	35.9	-35.5	5.4			
2	289	7.9	7.5	-2.6	291	10.4	9.7	-3.7	284	9.0	8.7	-2.2	289	3.9	3.7	-1.3	85	6.0	-6.0	-0.5	95	21.0	-20.9	1.7	99	37.0	-36.6	5.5			
3	298	7.6	6.7	-3.6	295	9.1	8.2	-3.9	290	8.2	7.7	-2.8	281	4.2	4.1	-0.8	84	8.7	-8.7	-0.9	93	24.2	-24.2	1.4	94	33.3	-33.2	2.2			
4	278	6.3	6.2	-0.9	295	9.7	8.8	-4.1	286	8.1	7.8	-2.2	262	3.5	3.5	0.5	94	7.8	-7.8	0.6	98	22.3	-22.1	3.1	93	35.8	-35.8	1.7			
5	272	6.2	6.2	-0.2	296	7.5	6.7	-3.3	286	6.6	6.4	-1.8	279	3.6	3.6	-0.6	97	6.8	-6.8	0.8	95	22.9	-22.8	2.0	103	30.8	-30.0	7.1			
6	293	6.9	6.3	-2.7	290	9.5	8.9	-3.3	288	8.4	8.0	-2.6	300	5.1	4.4	-2.5	88	6.8	-6.8	-0.2	98	20.4	-20.2	2.9	102	28.9	-28.3	6.0			
7	278	8.5	8.4	-1.2	289	10.2	9.7	-3.3	293	8.8	8.1	-3.5	260	1.1	1.1	0.2	97	7.9	-7.8	1.0	99	22.6	-22.3	3.6	99	27.7	-27.3	4.4			
8	265	8.5	8.5	0.8	289	10.6	10.0	-3.4	295	8.5	7.7	-3.6	272	2.4	2.4	-0.1	73	8.2	-7.8	-2.4	90	19.6	-19.6	0.1	99	36.5	-36.1	5.4			
9	269	7.7	7.7	0.2	282	8.9	8.7	-1.9	284	8.5	8.2	-2.1	267	3.7	3.7	0.2	93	6.8	-6.8	0.4	88	18.4	-18.4	-0.8	103	33.2	-32.4	7.2			
10	285	7.9	7.6	-2.0	293	9.6	8.8	-3.8	289	7.5	7.1	-2.4	268	3.5	3.5	0.1	98	6.2	-6.1	0.9	97	24.2	-24.0	3.0	96	35.1	-34.9	3.7			
11	271	9.2	9.2	-0.2	288	10.0	9.5	-3.0	289	8.4	8.0	-2.7	344	2.9	0.8	-2.8	100	8.2	-8.1	1.5	107	21.5	-20.6	6.2	106	36.4	-34.9	10.2			
12	271	9.8	9.8	-0.2	288	10.2	9.7	-3.1	286	8.4	8.1	-2.3	280	2.2	2.2	-0.4	91	6.4	-6.4	0.1	105	19.9	-19.2	5.2	104	32.1	-31.1	7.9			
13	289	6.9	6.5	-2.3	295	10.3	9.3	-4.4	292	9.2	8.5	-3.4	250	5.2	4.9	1.8	117	6.8	-6.0	3.1	97	20.2	-20.1	2.3	98	33.5	-33.2	4.6			
14	314	3.6	2.6	-2.5	289	10.3	9.8	-3.3	292	10.5	9.7	-3.9	287	5.5	5.3	-1.6	99	5.9	-5.8	0.9	100	20.7	-20.4	3.7	101	32.8	-32.2	6.5			
15	285	8.8	8.5	-2.2	294	10.5	9.6	-4.2	292	10.0	9.3	-3.7	265	3.2	3.2	0.3	93	7.2	-7.2	0.4	95	20.9	-20.8	1.9	102	29.4	-28.8	6.0			
16	286	10.6	10.2	-3.0	293	11.3	10.4	-4.4	291	10.1	9.4	-3.7	326	3.0	1.7	-2.5	92	7.3	-7.3	0.3	89	18.8	-18.8	-0.2	98	31.9	-31.6	4.5			
17	279	10.8	10.7	-1.6	289	12.9	12.2	-4.3	289	11.4	10.8	-3.8	289	4.6	4.4	-1.5	74	6.6	-6.4	-1.8	96	17.4	-17.3	1.7	110	35.0	-33.0	11.7			
18	278	8.8	8.7	-1.3	289	11.2	10.6	-3.7	288	10.6	10.1	-3.2	266	3.1	3.1	0.2	88	6.6	-6.6	-0.2	98	19.0	-18.8	2.5	101	37.2	-36.6	6.8			
19	277	9.5	9.4	-1.2	287	11.7	11.2	-3.5	292	10.3	9.6	-3.8	261	4.7	4.6	0.7	84	6.1	-6.1	-0.6	95	19.0	-18.9	1.8	98	32.8	-32.5	4.3			
20	286	7.1	6.8	-1.9	295	10.5	9.5	-4.4	297	10.3	9.2	-4.6	272	3.7	3.7	-0.1	92	7.6	-7.6	0.2	98	24.7	-24.4	3.6	95	29.4	-29.3	2.6			
21	290	7.1	6.7	-2.4	292	12.0	11.1	-4.5	285	10.6	10.2	-2.7	292	4.5	4.2	-1.7	78	7.8	-7.6	-1.6	97	21.5	-21.4	2.5	95	33.8	-33.6	3.2			
22	303	10.2	8.5	-5.6	295	12.8	11.6	-5.3	291	11.0	10.3	-4.0	303	4.2	3.5	-2.3	112	3.5	-3.3	1.3	97	19.3	-19.2	2.4	94	37.9	-37.8	2.5			
23	296	7.9	7.1	-3.4	291	10.5	9.8	-3.8	294	9.6	8.8	-3.9	291	2.2	2.1	-0.8	80	5.6	-5.5	-1.0	100	19.0	-18.7	3.4	96	36.5	-36.3	3.6			
24	279	8.6	8.5	-1.4	294	10.7	9.7	-4.4	287	9.9	9.5	-2.9	234	2.9	2.3	1.7	100	11.2	-11.0	2.0	89	21.8	-21.8	-0.3	91	39.7	-39.7	0.5			
25	279	10.2	10.1	-1.6	287	9.9	9.5	-2.9	287	9.4	9.0	-2.8	315	0.7	0.5	-0.5	102	8.9	-8.7	1.9	93	20.5	-20.5	1.0	95	28.7	-28.6	2.4			
26	276	9.3	9.2	-1.0	290	10.8	10.1	-3.7	287	9.8	9.4	-2.8	294	5.5	5.0	-2.2	95	8.6	-8.6	0.7	97	23.8	-23.6	3.0	99	32.6	-32.2	4.9			
27	281	9.1	8.9	-1.8	295	10.7	9.7	-4.6	289	8.3	7.8	-2.7	264	4.4	4.4	0.5	79	7.7	-7.6	-1.5	96	20.2	-20.1	2.1	102	39.0	-38.1	8.1			
28	275	9.6	9.6	-0.9	292	10.8	10.0	-4.1	288	9.9	9.4	-3.1	280	5.2	5.1	-0.9	87	6.8	-6.8	-0.4	95	23.5	-23.4	2.2	99	41.4	-40.9	6.5			
29	284	9.5	9.2	-2.3	294	9.7	8.8	-4.0	288	8.6	8.2	-2.6	288	3.9	3.7	-1.2	95	8.8	-8.8	0.7	98	23.2	-23.0	3.2	98	30.3	-30.0	4.0			
30	283	10.1	9.9	-2.2	287	10.4	10.0	-3.0	286	9.4	9.0	-2.6	310	5.9	4.5	-3.8	59	9.8	-8.4	-5.0	85	20.5	-20.4	-1.7	101	35.5	-34.9	6.5			
31	281	10.6	10.4	-2.1	294	11.9	10.9	-4.8	288	9.5	9.0	-3.0	297	4.0	3.6	-1.8	82	4.9	-4.9	-0.7	92	21.3	-21.3	0.6	91	45.0	-45.0	0.8			

Daily Normals of Upper Air Winds (1971-2000)

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MANGLORE

AUGUST

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	284	9.3	9.0	-2.2	296	12.7	11.4	-5.6	293	10.1	9.3	-4.0	298	3.4	3.0	-1.6	81	6.3	-6.2	-1.0	96	22.1	-22.0	2.5	94	32.6	-32.5	2.3			
2	288	10.0	9.5	-3.0	296	11.8	10.6	-5.2	296	10.9	9.8	-4.7	287	3.0	2.9	-0.9	79	5.8	-5.7	-1.1	97	20.8	-20.6	2.7	98	34.1	-33.8	4.6			
3	294	10.1	9.2	-4.1	294	11.9	10.8	-4.9	294	9.9	9.1	-4.0	299	2.1	1.8	-1.0	98	9.5	-9.4	1.3	100	24.9	-24.5	4.2	98	31.4	-31.1	4.4			
4	298	8.4	7.4	-3.9	296	10.2	9.1	-4.5	290	8.7	8.2	-3.0	270	3.3	3.3	0.0	102	7.0	-6.8	1.5	95	23.4	-23.3	1.9	98	29.4	-29.1	4.0			
5	288	7.9	7.5	-2.4	299	9.2	8.1	-4.4	284	8.4	8.2	-2.0	286	3.5	3.4	-1.0	93	6.1	-6.1	0.3	96	24.1	-24.0	2.5	98	27.9	-27.6	3.9			
6	275	9.0	9.0	-0.8	293	10.8	9.9	-4.2	293	8.4	7.7	-3.3	298	3.0	2.6	-1.4	86	7.2	-7.2	-0.5	98	22.3	-22.1	3.3	99	26.2	-25.8	4.3			
7	277	6.2	6.1	-0.8	292	9.4	8.7	-3.5	293	9.8	9.0	-3.9	316	4.3	3.0	-3.1	99	6.0	-5.9	0.9	93	18.9	-18.9	1.0	100	34.1	-33.5	6.2			
8	285	8.3	8.0	-2.2	293	10.9	10.0	-4.3	292	9.6	8.9	-3.6	296	4.3	3.9	-1.9	91	6.4	-6.4	0.1	93	19.0	-19.0	0.9	99	30.9	-30.5	4.8			
9	286	8.9	8.5	-2.5	298	12.0	10.6	-5.6	292	10.6	9.9	-3.9	294	4.6	4.2	-1.9	85	5.3	-5.3	-0.5	101	21.4	-21.0	4.0	94	30.7	-30.6	1.9			
10	285	8.0	7.7	-2.0	293	11.7	10.8	-4.5	294	9.4	8.6	-3.8	300	4.2	3.6	-2.1	96	5.0	-5.0	0.5	96	21.0	-20.9	2.2	100	31.8	-31.3	5.7			
11	287	8.7	8.3	-2.6	288	10.2	9.7	-3.1	283	9.6	9.3	-2.2	291	3.9	3.6	-1.4	88	7.0	-7.0	-0.3	101	22.2	-21.8	4.2	92	32.6	-32.6	1.3			
12	282	8.0	7.8	-1.7	295	10.7	9.7	-4.6	292	9.9	9.2	-3.7	277	3.9	3.9	-0.5	81	5.8	-5.7	-0.9	98	20.0	-19.8	2.7	100	30.9	-30.4	5.4			
13	290	7.2	6.7	-2.5	296	9.0	8.1	-4.0	290	9.1	8.6	-3.1	311	4.0	3.0	-2.6	88	8.1	-8.1	-0.3	89	17.6	-17.6	-0.4	93	30.6	-30.6	1.6			
14	298	7.6	6.7	-3.6	296	9.9	8.9	-4.4	293	9.7	8.9	-3.8	298	3.8	3.4	-1.8	93	7.8	-7.8	0.4	91	23.8	-23.8	0.3	103	28.5	-27.8	6.5			
15	293	7.3	6.7	-2.8	301	10.2	8.8	-5.2	293	9.2	8.5	-3.6	282	2.9	2.8	-0.6	87	5.9	-5.9	-0.3	97	19.6	-19.5	2.4	98	30.5	-30.2	4.5			
16	290	7.9	7.4	-2.7	297	11.2	10.0	-5.0	291	9.4	8.8	-3.4	297	3.0	2.7	-1.4	92	7.2	-7.2	0.3	94	19.3	-19.2	1.4	91	31.3	-31.3	0.7			
17	296	8.8	7.9	-3.9	299	11.1	9.7	-5.3	296	9.9	8.9	-4.4	287	2.8	2.7	-0.8	103	6.9	-6.7	1.6	101	19.8	-19.5	3.7	103	27.8	-27.1	6.3			
18	305	7.8	6.4	-4.4	304	10.0	8.3	-5.5	293	6.7	6.2	-2.6	304	3.0	2.5	-1.7	102	8.5	-8.3	1.7	105	23.1	-22.3	6.0	95	30.4	-30.3	2.8			
19	290	8.8	8.3	-3.0	300	9.9	8.5	-5.0	295	8.6	7.8	-3.6	297	3.0	2.7	-1.4	115	8.2	-7.4	3.5	103	22.6	-22.1	4.9	86	31.2	-31.1	-2.0			
20	294	8.1	7.4	-3.3	299	10.6	9.2	-5.2	297	9.0	8.0	-4.1	281	3.6	3.5	-0.7	104	6.5	-6.3	1.6	97	23.0	-22.8	3.0	92	29.1	-29.1	1.1			
21	291	7.7	7.2	-2.7	303	9.5	7.9	-5.2	300	8.6	7.4	-4.3	298	3.8	3.4	-1.8	107	7.0	-6.7	2.0	101	22.4	-22.0	4.2	94	29.8	-29.7	2.2			
22	301	8.6	7.4	-4.4	306	8.7	7.0	-5.1	300	7.9	6.8	-4.0	283	2.8	2.7	-0.6	112	7.1	-6.6	2.7	101	21.5	-21.1	4.1	98	28.3	-28.0	4.1			
23	296	10.9	9.8	-4.7	302	10.5	8.9	-5.5	293	9.1	8.4	-3.6	256	4.0	3.9	1.0	107	8.3	-7.9	2.4	95	20.5	-20.4	1.7	97	29.3	-29.1	3.5			
24	287	7.9	7.6	-2.3	299	9.1	8.0	-4.4	294	8.4	7.7	-3.4	294	4.9	4.5	-2.0	107	7.9	-7.6	2.3	98	19.1	-18.9	2.6	97	30.2	-30.0	3.5			
25	287	8.9	8.5	-2.6	295	9.5	8.6	-4.1	284	8.5	8.2	-2.1	288	4.8	4.6	-1.5	88	7.2	-7.2	-0.3	95	18.1	-18.0	1.6	97	30.6	-30.4	3.9			
26	288	9.9	9.4	-3.0	297	10.1	9.0	-4.5	286	9.1	8.8	-2.5	285	5.6	5.4	-1.4	87	5.8	-5.8	-0.3	97	19.3	-19.2	2.4	97	29.0	-28.8	3.5			
27	291	8.9	8.3	-3.2	302	9.3	7.9	-4.9	292	9.0	8.3	-3.4	302	4.5	3.8	-2.4	94	7.0	-7.0	0.5	97	20.0	-19.8	2.6	104	30.1	-29.2	7.1			
28	291	9.7	9.0	-3.5	300	9.6	8.3	-4.8	294	7.9	7.2	-3.2	308	2.4	1.9	-1.5	113	6.0	-5.5	2.3	94	19.0	-19.0	1.2	102	30.5	-29.9	6.2			
29	292	7.8	7.2	-2.9	299	9.0	7.8	-4.4	290	8.6	8.1	-2.9	273	3.7	3.7	-0.2	104	5.9	-5.7	1.4	97	18.1	-18.0	2.2	100	28.2	-27.8	4.9			
30	288	9.9	9.4	-3.1	299	9.4	8.2	-4.5	289	6.9	6.5	-2.3	267	3.6	3.6	0.2	93	6.8	-6.8	0.3	95	21.4	-21.3	1.8	96	26.4	-26.3	2.6			
31	289	10.4	9.8	-3.4	301	8.2	7.1	-4.2	282	6.8	6.7	-1.4	269	4.3	4.3	0.1	91	6.8	-6.8	0.1	98	20.3	-20.1	2.7	95	28.7	-28.6	2.4			

Daily Normals of Upper Air Winds (1971-2000)

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MANGLORE

SEPTEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	297	7.7	6.9	-3.5	301	7.1	6.1	-3.6	284	6.5	6.3	-1.6	309	0.6	0.5	-0.4	95	10.0	-10.0	0.8	97	23.1	-22.9	2.8	102	25.7	-25.1	5.3			
2	290	11.2	10.5	-3.9	302	8.2	7.0	-4.3	275	6.4	6.4	-0.6	279	2.6	2.6	-0.4	105	9.8	-9.5	2.6	94	22.5	-22.5	1.4	95	24.1	-24.0	2.0			
3	293	9.0	8.3	-3.6	298	7.8	6.9	-3.6	279	6.8	6.7	-1.1	274	1.4	1.4	-0.1	98	9.0	-8.9	1.2	100	20.4	-20.1	3.5	95	27.2	-27.1	2.2			
4	299	8.7	7.6	-4.2	306	7.7	6.2	-4.5	291	6.4	6.0	-2.3	260	2.8	2.8	0.5	94	7.9	-7.9	0.5	98	23.3	-23.1	3.1	90	23.2	-23.2	0.2			
5	302	7.3	6.2	-3.9	299	5.6	4.9	-2.7	291	5.5	5.1	-2.0	285	2.7	2.6	-0.7	94	8.8	-8.8	0.6	92	20.1	-20.1	0.8	94	21.2	-21.2	1.4			
6	300	6.1	5.3	-3.0	307	7.5	6.0	-4.5	287	5.9	5.6	-1.7	279	2.0	2.0	-0.3	97	11.0	-10.9	1.3	96	19.2	-19.1	2.1	96	25.8	-25.7	2.7			
7	299	6.0	5.3	-2.9	310	7.7	5.9	-4.9	294	6.7	6.1	-2.7	312	2.4	1.8	-1.6	94	8.0	-8.0	0.6	106	20.1	-19.3	5.5	102	22.6	-22.1	4.8			
8	296	6.8	6.1	-3.0	308	7.4	5.8	-4.6	300	6.2	5.4	-3.1	270	0.9	0.9	0.0	103	7.6	-7.4	1.7	101	18.2	-17.9	3.4	102	20.8	-20.4	4.2			
9	301	6.4	5.5	-3.3	316	6.8	4.7	-4.9	300	5.6	4.9	-2.8	287	1.4	1.3	-0.4	100	8.9	-8.8	1.6	102	19.2	-18.8	3.9	99	26.9	-26.6	4.1			
10	299	5.7	5.0	-2.8	317	6.8	4.6	-5.0	302	5.9	5.0	-3.1	356	1.3	0.1	-1.3	99	8.0	-7.9	1.3	99	19.1	-18.8	3.1	103	23.7	-23.1	5.3			
11	311	6.0	4.5	-3.9	316	6.0	4.2	-4.3	287	3.9	3.7	-1.1	56	0.4	-0.3	-0.2	93	6.6	-6.6	0.4	101	17.9	-17.6	3.3	102	21.8	-21.3	4.5			
12	296	4.6	4.1	-2.0	312	5.4	4.0	-3.6	295	4.7	4.3	-2.0	117	0.7	-0.6	0.3	100	7.2	-7.1	1.2	91	16.9	-16.9	0.2	96	20.6	-20.5	2.2			
13	283	3.9	3.8	-0.9	313	4.9	3.6	-3.3	283	4.8	4.7	-1.1	342	0.9	0.3	-0.9	111	7.5	-7.0	2.7	97	18.4	-18.3	2.2	94	20.9	-20.8	1.6			
14	307	6.0	4.8	-3.6	313	5.0	3.6	-3.4	287	3.4	3.2	-1.0	106	0.7	-0.7	0.2	102	8.0	-7.8	1.6	98	18.4	-18.2	2.6	104	20.7	-20.1	4.9			
15	305	7.1	5.8	-4.1	315	4.7	3.3	-3.3	302	2.2	1.9	-1.2	106	0.7	-0.7	0.2	111	7.1	-6.6	2.5	107	17.4	-16.6	5.1	99	22.7	-22.4	3.5			
16	316	5.8	4.0	-4.2	317	5.0	3.4	-3.7	277	2.5	2.5	-0.3	343	1.0	0.3	-1.0	95	7.4	-7.4	0.7	102	16.5	-16.1	3.4	98	25.2	-25.0	3.3			
17	316	6.4	4.4	-4.6	309	4.8	3.7	-3.0	279	2.4	2.4	-0.4	86	1.5	-1.5	-0.1	105	7.5	-7.3	1.9	102	16.2	-15.8	3.4	99	21.2	-21.0	3.2			
18	316	6.3	4.4	-4.5	300	3.8	3.3	-1.9	276	2.7	2.7	-0.3	60	0.8	-0.7	-0.4	103	7.2	-7.0	1.6	98	15.2	-15.1	2.0	101	22.5	-22.1	4.1			
19	310	6.1	4.7	-3.9	304	5.0	4.2	-2.8	293	3.6	3.3	-1.4	39	1.3	-0.8	-1.0	97	7.6	-7.5	0.9	94	16.0	-16.0	1.1	95	19.7	-19.6	1.6			
20	320	6.0	3.9	-4.6	306	5.4	4.4	-3.2	301	2.1	1.8	-1.1	45	1.3	-0.9	-0.9	97	6.8	-6.8	0.8	103	17.2	-16.8	3.8	102	23.6	-23.1	4.9			
21	311	5.7	4.3	-3.7	297	4.0	3.6	-1.8	284	2.1	2.0	-0.5	90	0.8	-0.8	0.0	102	6.8	-6.7	1.4	100	13.3	-13.1	2.2	105	23.6	-22.8	6.2			
22	306	5.6	4.5	-3.3	299	4.7	4.1	-2.3	292	2.7	2.5	-1.0	275	1.2	1.2	-0.1	94	8.0	-8.0	0.5	104	16.4	-15.9	4.1	97	21.1	-21.0	2.5			
23	300	5.2	4.5	-2.6	301	4.3	3.7	-2.2	294	2.2	2.0	-0.9	80	1.1	-1.1	-0.2	102	6.9	-6.8	1.4	108	14.6	-13.9	4.4	102	20.5	-20.0	4.3			
24	307	3.9	3.1	-2.3	291	3.0	2.8	-1.1	315	0.7	0.5	-0.5	77	1.7	-1.7	-0.4	108	9.0	-8.6	2.8	107	18.3	-17.5	5.2	97	22.5	-22.3	2.6			
25	316	4.9	3.4	-3.5	307	3.5	2.8	-2.1	315	0.1	0.1	-0.1	105	2.4	-2.3	0.6	103	9.0	-8.8	2.1	102	16.3	-15.9	3.4	97	19.9	-19.8	2.4			
26	299	3.9	3.4	-1.9	311	3.2	2.4	-2.1	252	1.3	1.2	0.4	170	1.7	-0.3	1.7	101	7.0	-6.9	1.4	92	15.0	-15.0	0.5	98	19.3	-19.1	2.8			
27	292	3.7	3.4	-1.4	288	3.5	3.3	-1.1	278	3.0	3.0	-0.4	196	1.5	0.4	1.4	104	7.9	-7.7	1.9	98	15.2	-15.1	2.0	99	20.4	-20.2	3.1			
28	248	3.7	3.4	1.4	287	4.1	3.9	-1.2	310	1.6	1.2	-1.0	315	0.6	0.4	-0.4	109	6.1	-5.8	2.0	94	15.7	-15.7	1.2	95	17.0	-16.9	1.5			
29	283	4.7	4.6	-1.1	307	3.8	3.0	-2.3	300	1.6	1.4	-0.8	37	0.5	-0.3	-0.4	82	6.3	-6.2	-0.9	101	15.4	-15.1	3.0	97	18.7	-18.5	2.4			
30	259	2.5	2.5	0.5	300	2.4	2.1	-1.2	315	0.6	0.4	-0.4	331	1.0	0.5	-0.9	98	6.6	-6.5	0.9	89	13.1	-13.1	-0.3	92	17.1	-17.1	0.7			

Daily Normals of Upper Air Winds (1971-2000)

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MANGLORE

OCTOBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	270	3.1	3.1	0.0	309	3.3	2.6	-2.1	24	1.2	-0.5	-1.1	67	1.5	-1.4	-0.6	95	6.8	-6.8	0.6	104	14.2	-13.8	3.5	94	12.6	-12.6	0.8			
2	264	4.0	4.0	0.4	295	3.1	2.8	-1.3	295	2.3	2.1	-1.0	49	1.8	-1.4	-1.2	106	5.8	-5.6	1.6	104	13.3	-12.9	3.3	99	15.4	-15.2	2.4			
3	249	3.9	3.6	1.4	281	3.6	3.5	-0.7	302	2.6	2.2	-1.4	4	1.6	-0.1	-1.6	112	6.8	-6.3	2.6	96	13.0	-12.9	1.3	97	14.9	-14.8	1.7			
4	268	3.7	3.7	0.1	306	2.4	1.9	-1.4	312	1.5	1.1	-1.0	315	0.1	0.1	-0.1	81	4.7	-4.6	-0.7	93	11.1	-11.1	0.6	90	12.6	-12.6	0.0			
5	281	4.1	4.0	-0.8	309	2.8	2.2	-1.8	340	1.2	0.4	-1.1	106	0.7	-0.7	0.2	99	5.3	-5.2	0.8	103	12.0	-11.7	2.6	103	15.1	-14.7	3.4			
6	265	2.2	2.2	0.2	311	2.1	1.6	-1.4	243	0.2	0.2	0.1	189	0.6	0.1	0.6	120	5.1	-4.4	2.5	113	12.9	-11.9	5.0	94	14.0	-14.0	1.1			
7	287	3.4	3.2	-1.0	329	2.7	1.4	-2.3	31	0.6	-0.3	-0.5	119	1.0	-0.9	0.5	96	4.0	-4.0	0.4	108	13.1	-12.5	4.0	98	12.6	-12.5	1.7			
8	277	2.6	2.6	-0.3	306	1.7	1.4	-1.0	54	1.7	-1.4	-1.0	291	0.9	0.8	-0.3	86	4.8	-4.8	-0.3	109	12.3	-11.6	4.0	108	17.2	-16.4	5.3			
9	259	1.6	1.6	0.3	315	1.1	0.8	-0.8	9	0.6	-0.1	-0.6	122	1.5	-1.3	0.8	106	4.0	-3.8	1.1	110	8.4	-7.9	2.9	102	14.1	-13.8	2.9			
10	252	2.8	2.7	0.9	356	1.3	0.1	-1.3	80	1.1	-1.1	-0.2	135	1.7	-1.2	1.2	113	3.9	-3.6	1.5	110	8.9	-8.4	3.0	102	9.8	-9.6	2.1			
11	238	3.4	2.9	1.8	360	0.6	0.0	-0.6	113	0.8	-0.7	0.3	108	1.3	-1.2	0.4	117	4.9	-4.4	2.2	108	11.2	-10.7	3.4	97	13.7	-13.6	1.7			
12	245	2.1	1.9	0.9	27	0.9	-0.4	-0.8	87	2.1	-2.1	-0.1	88	2.4	-2.4	-0.1	97	4.2	-4.2	0.5	103	8.1	-7.9	1.8	90	10.8	-10.8	0.0			
13	243	2.8	2.5	1.3	53	1.0	-0.8	-0.6	105	2.4	-2.3	0.6	101	2.0	-2.0	0.4	121	2.9	-2.5	1.5	118	7.8	-6.9	3.7	89	10.0	-10.0	-0.2			
14	278	2.8	2.8	-0.4	27	1.8	-0.8	-1.6	73	2.7	-2.6	-0.8	80	1.7	-1.7	-0.3	104	5.7	-5.5	1.4	115	10.7	-9.7	4.5	103	11.8	-11.5	2.7			
15	288	2.5	2.4	-0.8	36	2.6	-1.5	-2.1	54	2.7	-2.2	-1.6	61	2.6	-2.3	-1.3	117	4.2	-3.7	1.9	120	10.9	-9.5	5.4	114	11.2	-10.2	4.6			
16	256	1.6	1.6	0.4	25	1.7	-0.7	-1.5	53	2.1	-1.7	-1.3	41	3.2	-2.1	-2.4	104	2.9	-2.8	0.7	110	10.1	-9.5	3.5	94	15.7	-15.7	1.0			
17	285	3.5	3.4	-0.9	3	1.9	-0.1	-1.9	71	3.4	-3.2	-1.1	79	3.6	-3.5	-0.7	101	3.7	-3.6	0.7	121	8.8	-7.6	4.5	111	14.6	-13.6	5.2			
18	325	3.2	1.8	-2.6	24	1.2	-0.5	-1.1	69	1.9	-1.8	-0.7	83	1.7	-1.7	-0.2	116	4.6	-4.1	2.0	121	7.7	-6.6	3.9	104	11.8	-11.5	2.8			
19	287	3.1	3.0	-0.9	63	0.9	-0.8	-0.4	59	2.1	-1.8	-1.1	90	1.1	-1.1	0.0	114	3.6	-3.3	1.5	112	9.2	-8.5	3.4	97	12.3	-12.2	1.6			
20	297	2.2	2.0	-1.0	68	2.4	-2.2	-0.9	97	3.5	-3.5	0.4	77	2.3	-2.2	-0.5	107	3.8	-3.6	1.1	115	6.4	-5.8	2.7	108	7.2	-6.9	2.2			
21	225	0.6	0.4	0.4	111	3.1	-2.9	1.1	96	3.0	-3.0	0.3	72	0.9	-0.9	-0.3	103	3.1	-3.0	0.7	120	6.0	-5.2	3.0	104	9.1	-8.8	2.2			
22	232	2.4	1.9	1.5	95	2.3	-2.3	0.2	100	2.9	-2.9	0.5	109	3.4	-3.2	1.1	94	3.0	-3.0	0.2	116	5.5	-5.0	2.4	100	10.2	-10.1	1.7			
23	234	1.9	1.5	1.1	82	2.8	-2.8	-0.4	94	2.6	-2.6	0.2	93	1.8	-1.8	0.1	108	2.2	-2.1	0.7	131	6.3	-4.8	4.1	114	6.7	-6.1	2.7			
24	274	1.3	1.3	-0.1	78	2.5	-2.4	-0.5	89	4.0	-4.0	-0.1	101	3.8	-3.7	0.7	108	3.6	-3.4	1.1	126	6.6	-5.3	3.9	100	8.3	-8.2	1.4			
25	310	3.0	2.3	-1.9	76	2.9	-2.8	-0.7	109	3.7	-3.5	1.2	108	2.3	-2.2	0.7	100	3.9	-3.8	0.7	138	5.9	-3.9	4.4	118	6.7	-5.9	3.2			
26	326	3.6	2.0	-3.0	64	2.8	-2.5	-1.2	95	3.8	-3.8	0.3	99	3.2	-3.2	0.5	127	3.6	-2.9	2.2	138	6.2	-4.1	4.6	118	7.2	-6.4	3.4			
27	283	2.2	2.1	-0.5	82	2.2	-2.2	-0.3	83	3.3	-3.3	-0.4	98	3.4	-3.4	0.5	148	2.5	-1.3	2.1	180	4.3	0.0	4.3	140	6.9	-4.4	5.3			
28	234	1.4	1.1	0.8	113	2.3	-2.1	0.9	85	3.2	-3.2	-0.3	114	2.4	-2.2	1.0	125	4.2	-3.4	2.4	127	6.0	-4.8	3.6	123	9.5	-8.0	5.2			
29	291	1.9	1.8	-0.7	87	1.7	-1.7	-0.1	90	2.4	-2.4	0.0	85	3.3	-3.3	-0.3	136	3.9	-2.7	2.8	161	5.6	-1.8	5.3	111	7.1	-6.6	2.5			
30	345	3.0	0.8	-2.9	72	2.2	-2.1	-0.7	69	1.9	-1.8	-0.7	96	3.8	-3.8	0.4	155	2.9	-1.2	2.6	155	5.6	-2.4	5.1	107	8.1	-7.7	2.4			
31	324	3.1	1.8	-2.5	75	3.5	-3.4	-0.9	82	2.8	-2.8	-0.4	70	3.2	-3.0	-1.1	146	3.0	-1.7	2.5	147	8.2	-4.4	6.9	115	6.1	-5.5	2.6			

Daily Normals of Upper Air Winds (1971-2000)

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MANGLORE

NOVEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	270	0.4	0.4	0.0	78	3.4	-3.3	-0.7	77	3.6	-3.5	-0.8	75	3.0	-2.9	-0.8	141	2.2	-1.4	1.7	156	8.1	-3.3	7.4	109	8.8	-8.3	2.8			
2	321	2.1	1.3	-1.6	66	2.7	-2.5	-1.1	67	2.6	-2.4	-1.0	83	4.7	-4.7	-0.6	121	2.7	-2.3	1.4	139	7.7	-5.0	5.8	114	10.1	-9.2	4.1			
3	344	0.7	0.2	-0.7	64	3.4	-3.1	-1.5	87	4.3	-4.3	-0.2	74	4.7	-4.5	-1.3	132	2.8	-2.1	1.9	151	9.3	-4.5	8.1	114	10.1	-9.2	4.1			
4	335	2.6	1.1	-2.4	73	2.7	-2.6	-0.8	88	3.5	-3.5	-0.1	89	4.3	-4.3	-0.1	140	1.6	-1.0	1.2	170	7.4	-1.3	7.3	118	5.9	-5.2	2.8			
5	354	1.9	0.2	-1.9	84	3.7	-3.7	-0.4	72	4.8	-4.6	-1.5	86	5.5	-5.5	-0.4	121	2.9	-2.5	1.5	157	7.7	-3.0	7.1	116	8.1	-7.3	3.6			
6	30	1.4	-0.7	-1.2	93	3.8	-3.8	0.2	82	4.2	-4.2	-0.6	82	6.1	-6.0	-0.8	105	2.7	-2.6	0.7	130	7.5	-5.7	4.8	106	10.0	-9.6	2.8			
7	55	1.2	-1.0	-0.7	81	3.0	-3.0	-0.5	93	3.5	-3.5	0.2	100	4.6	-4.5	0.8	122	4.4	-3.7	2.3	135	7.1	-5.0	5.0	115	6.2	-5.6	2.6			
8	14	0.8	-0.2	-0.8	84	3.7	-3.7	-0.4	80	3.6	-3.5	-0.6	94	4.0	-4.0	0.3	113	2.5	-2.3	1.0	143	7.7	-4.6	6.2	99	8.3	-8.2	1.3			
9	162	0.9	-0.3	0.9	93	4.2	-4.2	0.2	94	4.6	-4.6	0.3	94	4.6	-4.6	0.3	120	4.6	-4.0	2.3	145	7.0	-4.0	5.8	111	6.5	-6.1	2.3			
10	320	2.6	1.7	-2.0	77	2.8	-2.7	-0.6	87	3.6	-3.6	-0.2	90	3.4	-3.4	0.0	102	4.2	-4.1	0.9	153	6.8	-3.1	6.0	103	6.7	-6.5	1.5			
11	37	1.0	-0.6	-0.8	79	4.1	-4.0	-0.8	99	4.0	-4.0	0.6	92	4.8	-4.8	0.2	123	3.7	-3.1	2.0	168	5.7	-1.2	5.6	122	3.6	-3.0	1.9			
12	342	0.9	0.3	-0.9	71	3.7	-3.5	-1.2	91	4.7	-4.7	0.1	82	6.3	-6.2	-0.9	101	4.1	-4.0	0.8	140	7.0	-4.5	5.3	122	4.1	-3.5	2.2			
13	4	1.3	-0.1	-1.3	82	4.2	-4.2	-0.6	91	4.0	-4.0	0.1	89	4.3	-4.3	-0.1	107	4.2	-4.0	1.2	144	5.7	-3.4	4.6	110	5.6	-5.3	1.9			
14	27	1.8	-0.8	-1.6	83	3.3	-3.3	-0.4	88	3.2	-3.2	-0.1	93	4.4	-4.4	0.2	125	3.8	-3.1	2.2	160	5.1	-1.7	4.8	119	6.4	-5.6	3.1			
15	56	3.4	-2.8	-1.9	83	4.2	-4.2	-0.5	82	4.3	-4.3	-0.6	67	5.2	-4.8	-2.0	106	2.9	-2.8	0.8	156	7.8	-3.2	7.1	108	4.9	-4.7	1.5			
16	99	1.8	-1.8	0.3	105	4.3	-4.2	1.1	118	2.6	-2.3	1.2	121	2.3	-2.0	1.2	180	2.9	0.0	2.9	161	6.0	-2.0	5.7	94	5.5	-5.5	0.4			
17	180	0.8	0.0	0.8	112	3.2	-3.0	1.2	106	2.6	-2.5	0.7	117	2.0	-1.8	0.9	172	2.8	-0.4	2.8	175	6.8	-0.6	6.8	131	3.3	-2.5	2.2			
18	329	0.6	0.3	-0.5	80	2.7	-2.7	-0.5	87	3.5	-3.5	-0.2	52	1.8	-1.4	-1.1	238	4.4	3.7	2.3	200	5.3	1.8	5.0	137	2.1	-1.4	1.5			
19	328	0.9	0.5	-0.8	92	2.8	-2.8	0.1	84	3.1	-3.1	-0.3	83	3.2	-3.2	-0.4	196	2.6	0.7	2.5	199	9.0	2.9	8.5	164	0.7	-0.2	0.7			
20	351	1.2	0.2	-1.2	88	3.1	-3.1	-0.1	86	4.2	-4.2	-0.3	92	3.8	-3.8	0.1	217	3.5	2.1	2.8	200	9.8	3.3	9.2	160	3.2	-1.1	3.0			
21	20	1.5	-0.5	-1.4	99	4.0	-4.0	0.6	95	4.3	-4.3	0.4	63	2.7	-2.4	-1.2	216	2.7	1.6	2.2	193	6.9	1.5	6.7	175	3.4	-0.3	3.4			
22	53	2.5	-2.0	-1.5	86	4.0	-4.0	-0.3	85	4.5	-4.5	-0.4	69	1.9	-1.8	-0.7	212	4.1	2.2	3.5	204	10.1	4.1	9.2	158	3.2	-1.2	3.0			
23	49	1.1	-0.8	-0.7	72	3.3	-3.1	-1.0	99	5.0	-4.9	0.8	87	2.0	-2.0	-0.1	198	2.5	0.8	2.4	197	8.8	2.6	8.4	114	4.7	-4.3	1.9			
24	27	1.1	-0.5	-1.0	88	3.6	-3.6	-0.1	94	2.6	-2.6	0.2	92	3.6	-3.6	0.1	168	4.0	-0.8	3.9	189	7.7	1.2	7.6	124	5.5	-4.6	3.1			
25	274	1.4	1.4	-0.1	81	3.0	-3.0	-0.5	77	3.2	-3.1	-0.7	79	4.1	-4.0	-0.8	251	2.1	2.0	0.7	188	7.4	1.0	7.3	103	4.3	-4.2	1.0			
26	347	1.7	0.4	-1.7	96	3.9	-3.9	0.4	117	2.7	-2.4	1.2	102	3.0	-2.9	0.6	212	2.5	1.3	2.1	206	4.8	2.1	4.3	129	4.6	-3.6	2.9			
27	13	2.2	-0.5	-2.1	82	3.5	-3.5	-0.5	83	3.1	-3.1	-0.4	120	3.8	-3.3	1.9	217	1.5	0.9	1.2	183	6.5	0.3	6.5	129	2.1	-1.6	1.3			
28	3	1.8	-0.1	-1.8	81	4.5	-4.4	-0.7	76	3.3	-3.2	-0.8	70	4.0	-3.8	-1.4	209	2.1	1.0	1.8	192	8.4	1.7	8.2	95	2.3	-2.3	0.2			
29	17	2.4	-0.7	-2.3	90	4.5	-4.5	0.0	86	2.9	-2.9	-0.2	74	5.0	-4.8	-1.4	215	3.3	1.9	2.7	198	8.9	2.8	8.5	132	2.4	-1.8	1.6			
30	3	2.1	-0.1	-2.1	84	4.4	-4.4	-0.5	92	3.2	-3.2	0.1	84	4.5	-4.5	-0.5	218	2.3	1.4	1.8	205	8.6	3.7	7.8	95	3.6	-3.6	0.3			

Daily Normals of Upper Air Winds (1971-2000)

MANGLORE

DECEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	56	1.4	-1.2	-0.8	92	4.9	-4.9	0.2	89	4.6	-4.6	-0.1	87	5.6	-5.6	-0.3	212	2.2	1.2	1.9	211	8.5	4.4	7.3	141	1.9	-1.2	1.5
2	333	0.9	0.4	-0.8	85	5.3	-5.3	-0.5	91	4.5	-4.5	0.1	79	4.3	-4.2	-0.8	231	2.1	1.6	1.3	222	8.2	5.5	6.1	180	1.8	0.0	1.8
3	43	2.6	-1.8	-1.9	89	5.3	-5.3	-0.1	91	4.4	-4.4	0.1	81	5.0	-4.9	-0.8	215	2.1	1.2	1.7	217	6.2	3.7	5.0	188	3.6	0.5	3.6
4	30	2.2	-1.1	-1.9	92	6.0	-6.0	0.2	72	5.2	-5.0	-1.6	76	4.6	-4.5	-1.1	186	1.9	0.2	1.9	189	6.7	1.1	6.6	148	0.9	-0.5	0.8
5	52	1.6	-1.3	-1.0	81	4.6	-4.5	-0.7	71	4.6	-4.4	-1.5	86	2.9	-2.9	-0.2	221	2.9	1.9	2.2	202	5.6	2.1	5.2	113	1.3	-1.2	0.5
6	87	1.7	-1.7	-0.1	87	6.1	-6.1	-0.3	77	3.9	-3.8	-0.9	73	2.7	-2.6	-0.8	211	2.9	1.5	2.5	197	7.7	2.3	7.3	209	3.3	1.6	2.9
7	54	2.4	-1.9	-1.4	90	4.8	-4.8	0.0	75	4.2	-4.1	-1.1	85	2.5	-2.5	-0.2	238	4.6	3.9	2.4	210	8.9	4.4	7.7	129	1.4	-1.1	0.9
8	12	1.4	-0.3	-1.4	103	4.9	-4.8	1.1	82	4.9	-4.9	-0.7	86	1.5	-1.5	-0.1	243	5.1	4.6	2.3	219	8.0	5.1	6.2	164	1.8	-0.5	1.7
9	36	1.7	-1.0	-1.4	91	4.1	-4.1	0.1	70	3.8	-3.6	-1.3	360	0.1	0.0	-0.1	246	5.8	5.3	2.4	227	10.3	7.6	7.0	253	5.4	5.2	1.6
10	38	2.9	-1.8	-2.3	98	4.9	-4.8	0.7	95	3.8	-3.8	0.3	90	2.2	-2.2	0.0	246	4.7	4.3	1.9	217	9.5	5.7	7.6	196	1.5	0.4	1.4
11	70	3.2	-3.0	-1.1	96	5.1	-5.1	0.5	107	4.9	-4.7	1.4	92	3.8	-3.8	0.1	235	5.1	4.2	2.9	216	9.8	5.8	7.9	134	3.3	-2.4	2.3
12	114	2.4	-2.2	1.0	103	6.3	-6.1	1.4	104	3.4	-3.3	0.8	104	2.1	-2.0	0.5	238	6.6	5.6	3.5	215	10.0	5.8	8.2	276	3.1	3.1	-0.3
13	105	2.3	-2.2	0.6	95	6.3	-6.3	0.6	101	4.2	-4.1	0.8	61	1.8	-1.6	-0.9	264	7.4	7.4	0.8	232	8.3	6.5	5.1	312	1.3	1.0	-0.9
14	93	2.1	-2.1	0.1	87	5.0	-5.0	-0.3	95	3.3	-3.3	0.3	90	1.2	-1.2	0.0	283	7.2	7.0	-1.6	236	9.9	8.2	5.5	310	1.6	1.2	-1.0
15	45	1.8	-1.3	-1.3	88	4.7	-4.7	-0.2	76	2.9	-2.8	-0.7	69	1.7	-1.6	-0.6	270	6.4	6.4	0.0	245	10.5	9.5	4.4	319	5.0	3.3	-3.8
16	127	2.0	-1.6	1.2	91	5.0	-5.0	0.1	84	3.1	-3.1	-0.3	126	1.7	-1.4	1.0	276	4.7	4.7	-0.5	235	9.3	7.6	5.4	323	0.5	0.3	-0.4
17	80	1.7	-1.7	-0.3	92	5.7	-5.7	0.2	90	3.3	-3.3	0.0	21	1.4	-0.5	-1.3	266	8.9	8.9	0.6	237	12.6	10.5	6.9	263	2.4	2.4	0.3
18	18	0.9	-0.3	-0.9	91	5.0	-5.0	0.1	105	3.1	-3.0	0.8	47	1.9	-1.4	-1.3	277	7.5	7.4	-0.9	244	11.3	10.2	4.9	315	1.1	0.8	-0.8
19	35	1.2	-0.7	-1.0	88	5.9	-5.9	-0.2	68	3.5	-3.2	-1.3	101	1.5	-1.5	0.3	259	5.1	5.0	1.0	245	12.2	11.0	5.2	270	3.8	3.8	0.0
20	28	1.7	-0.8	-1.5	84	5.7	-5.7	-0.6	79	4.6	-4.5	-0.9	45	2.4	-1.7	-1.7	269	8.3	8.3	0.1	254	10.3	9.9	2.9	302	3.4	2.9	-1.8
21	21	0.9	-0.3	-0.8	95	6.0	-6.0	0.5	106	3.7	-3.6	1.0	104	2.1	-2.0	0.5	246	6.4	5.9	2.6	248	11.3	10.4	4.3	254	5.8	5.6	1.6
22	82	2.9	-2.9	-0.4	90	5.3	-5.3	0.0	99	4.4	-4.3	0.7	36	1.4	-0.8	-1.1	248	7.4	6.9	2.8	245	11.8	10.7	4.9	245	4.3	3.9	1.8
23	30	2.0	-1.0	-1.7	90	5.3	-5.3	0.0	88	3.6	-3.6	-0.1	82	2.8	-2.8	-0.4	264	9.2	9.2	0.9	243	14.4	12.8	6.5	255	4.3	4.2	1.1
24	74	1.9	-1.8	-0.5	87	5.7	-5.7	-0.3	73	4.5	-4.3	-1.3	307	1.0	0.8	-0.6	247	8.0	7.4	3.1	241	9.2	8.1	4.4	262	6.3	6.2	0.9
25	24	1.7	-0.7	-1.6	86	5.3	-5.3	-0.4	86	2.8	-2.8	-0.2	322	1.1	0.7	-0.9	259	11.0	10.8	2.1	251	12.6	11.9	4.2	237	5.9	5.0	3.2
26	7	1.7	-0.2	-1.7	91	4.5	-4.5	0.1	79	3.6	-3.5	-0.7	108	0.6	-0.6	0.2	272	8.6	8.6	-0.3	254	12.0	11.5	3.4	247	9.4	8.6	3.7
27	30	2.0	-1.0	-1.7	83	5.4	-5.4	-0.7	51	2.2	-1.7	-1.4	219	1.3	0.8	1.0	263	5.9	5.9	0.7	235	14.1	11.5	8.1	260	5.1	5.0	0.9
28	65	1.9	-1.7	-0.8	99	5.1	-5.0	0.8	71	2.8	-2.6	-0.9	285	1.6	1.5	-0.4	247	7.5	6.9	3.0	243	14.4	12.9	6.5	276	2.8	2.8	-0.3
29	62	1.9	-1.7	-0.9	83	4.1	-4.1	-0.5	74	3.3	-3.2	-0.9	233	1.0	0.8	0.6	258	9.4	9.2	2.0	241	14.0	12.2	6.8	285	3.0	2.9	-0.8
30	77	0.9	-0.9	-0.2	88	4.6	-4.6	-0.2	83	2.4	-2.4	-0.3	265	1.1	1.1	0.1	261	9.2	9.1	1.4	232	13.5	10.6	8.3	245	2.9	2.6	1.2
31	354	0.9	0.1	-0.9	94	4.4	-4.4	0.3	75	2.7	-2.6	-0.7	248	0.5	0.5	0.2	245	9.9	9.0	4.2	249	12.9	12.1	4.6	239	2.7	2.3	1.4

Daily Normals of Upper Air Winds (1971-2000)

MINICOY

JANUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	60	3.4	-2.9	-1.7	63	3.4	-3.0	-1.5	81	4.4	-4.3	-0.7	84	6.9	-6.9	-0.7	160	2.7	-0.9	2.5	180	6.4	0.0	6.4	129	5.1	-4.0	3.2
2	55	4.0	-3.3	-2.3	78	3.3	-3.2	-0.7	97	3.1	-3.1	0.4	77	6.5	-6.3	-1.4	124	5.0	-4.2	2.8	176	4.6	-0.3	4.6	136	6.2	-4.3	4.4
3	59	3.7	-3.2	-1.9	70	2.7	-2.5	-0.9	81	2.5	-2.5	-0.4	64	5.5	-4.9	-2.4	161	4.9	-1.6	4.6	174	8.1	-0.9	8.0	35	2.1	-1.2	-1.7
4	77	3.5	-3.4	-0.8	84	3.1	-3.1	-0.3	75	2.3	-2.2	-0.6	82	5.2	-5.2	-0.7	155	2.6	-1.1	2.4	190	5.0	0.9	4.9	130	2.3	-1.8	1.5
5	56	4.8	-4.0	-2.7	60	4.0	-3.5	-2.0	76	2.1	-2.0	-0.5	98	3.0	-3.0	0.4	147	1.7	-0.9	1.4	227	2.2	1.6	1.5	62	2.4	-2.1	-1.1
6	61	3.9	-3.4	-1.9	61	3.7	-3.2	-1.8	63	2.9	-2.6	-1.3	103	3.1	-3.0	0.7	90	1.8	-1.8	0.0	212	3.9	2.1	3.3	76	2.1	-2.0	-0.5
7	37	4.6	-2.8	-3.7	58	3.6	-3.1	-1.9	60	3.8	-3.3	-1.9	83	4.1	-4.1	-0.5	175	3.2	-0.3	3.2	173	4.8	-0.6	4.8	137	3.7	-2.5	2.7
8	70	3.8	-3.6	-1.3	69	3.0	-2.8	-1.1	70	3.0	-2.8	-1.0	83	3.4	-3.4	-0.4	173	2.5	-0.3	2.5	221	3.5	2.3	2.6	168	3.9	-0.8	3.8
9	82	5.1	-5.1	-0.7	80	3.5	-3.4	-0.6	72	2.5	-2.4	-0.8	76	4.6	-4.5	-1.1	135	0.4	-0.3	0.3	211	5.4	2.8	4.6	270	0.4	0.4	0.0
10	49	5.8	-4.4	-3.8	69	2.8	-2.6	-1.0	86	2.6	-2.6	-0.2	61	2.6	-2.3	-1.3	90	0.3	-0.3	0.0	204	2.2	0.9	2.0	90	5.3	-5.3	0.0
11	71	3.7	-3.5	-1.2	72	2.2	-2.1	-0.7	83	1.7	-1.7	-0.2	76	4.1	-4.0	-1.0	193	1.7	0.4	1.7	194	7.3	1.8	7.1	123	2.0	-1.7	1.1
12	36	3.1	-1.8	-2.5	67	2.6	-2.4	-1.0	61	2.1	-1.8	-1.0	67	4.4	-4.1	-1.7	198	3.3	1.0	3.1	195	5.2	1.3	5.0	112	4.6	-4.3	1.7
13	36	2.7	-1.6	-2.2	49	2.3	-1.7	-1.5	53	2.0	-1.6	-1.2	72	5.8	-5.5	-1.8	173	3.1	-0.4	3.1	174	7.3	-0.8	7.3	96	3.0	-3.0	0.3
14	58	2.8	-2.4	-1.5	74	3.3	-3.2	-0.9	97	1.7	-1.7	0.2	72	5.5	-5.2	-1.7	262	1.4	1.4	0.2	173	7.1	-0.9	7.0	94	3.9	-3.9	0.3
15	51	3.2	-2.5	-2.0	62	2.7	-2.4	-1.3	63	0.9	-0.8	-0.4	95	4.3	-4.3	0.4	223	2.3	1.6	1.7	178	7.0	-0.3	7.0	98	4.3	-4.3	0.6
16	54	4.4	-3.6	-2.6	63	4.0	-3.6	-1.8	63	2.0	-1.8	-0.9	96	4.4	-4.4	0.5	198	0.6	0.2	0.6	180	4.4	0.0	4.4	99	2.0	-2.0	0.3
17	68	3.1	-2.9	-1.2	75	4.3	-4.2	-1.1	88	3.4	-3.4	-0.1	88	3.8	-3.8	-0.1	292	0.5	0.5	-0.2	167	5.4	-1.2	5.3	137	2.3	-1.6	1.7
18	54	3.4	-2.8	-2.0	77	4.0	-3.9	-0.9	99	3.1	-3.1	0.5	72	4.3	-4.1	-1.3	166	3.3	-0.8	3.2	179	4.2	-0.1	4.2	97	5.2	-5.2	0.6
19	61	4.3	-3.8	-2.1	81	3.7	-3.7	-0.6	72	2.9	-2.8	-0.9	74	4.6	-4.4	-1.3	191	1.5	0.3	1.5	200	6.3	2.1	5.9	92	2.9	-2.9	0.1
20	33	3.8	-2.1	-3.2	66	2.7	-2.5	-1.1	98	1.4	-1.4	0.2	81	5.3	-5.2	-0.8	126	2.4	-1.9	1.4	161	5.8	-1.9	5.5	121	4.3	-3.7	2.2
21	42	4.2	-2.8	-3.1	49	3.7	-2.8	-2.4	21	1.9	-0.7	-1.8	63	5.1	-4.6	-2.3	167	2.3	-0.5	2.2	182	6.9	0.2	6.9	126	0.9	-0.7	0.5
22	36	4.2	-2.5	-3.4	62	3.6	-3.2	-1.7	72	3.5	-3.3	-1.1	63	5.4	-4.8	-2.4	191	1.5	0.3	1.5	181	4.6	0.1	4.6	118	7.9	-7.0	3.7
23	38	4.8	-3.0	-3.8	70	3.8	-3.6	-1.3	75	3.5	-3.4	-0.9	64	6.0	-5.4	-2.6	41	0.9	-0.6	-0.7	158	5.2	-1.9	4.8	119	2.5	-2.2	1.2
24	50	4.0	-3.1	-2.6	64	4.3	-3.9	-1.9	78	4.3	-4.2	-0.9	81	5.5	-5.4	-0.9	288	0.6	0.6	-0.2	145	4.4	-2.5	3.6	132	4.2	-3.1	2.8
25	56	4.1	-3.4	-2.3	71	4.9	-4.6	-1.6	89	4.7	-4.7	-0.1	99	5.7	-5.6	0.9	81	2.0	-2.0	-0.3	135	4.5	-3.2	3.2	91	5.3	-5.3	0.1
26	67	5.7	-5.3	-2.2	73	4.5	-4.3	-1.3	74	3.7	-3.6	-1.0	83	6.2	-6.1	-0.8	110	2.3	-2.2	0.8	150	5.1	-2.5	4.4	142	5.3	-3.3	4.2
27	67	4.0	-3.7	-1.6	86	3.2	-3.2	-0.2	66	3.4	-3.1	-1.4	81	6.8	-6.7	-1.1	130	0.8	-0.6	0.5	211	0.6	0.3	0.5	119	2.3	-2.0	1.1
28	31	4.2	-2.2	-3.6	69	5.1	-4.8	-1.8	78	4.2	-4.1	-0.9	70	5.1	-4.8	-1.7	79	1.5	-1.5	-0.3	144	4.4	-2.6	3.6	278	1.4	1.4	-0.2
29	52	5.0	-3.9	-3.1	72	3.9	-3.7	-1.2	80	2.9	-2.9	-0.5	72	6.8	-6.5	-2.1	139	3.5	-2.3	2.6	152	5.2	-2.4	4.6	86	9.4	-9.4	-0.7
30	41	2.8	-1.8	-2.1	68	3.7	-3.4	-1.4	66	2.7	-2.5	-1.1	71	5.9	-5.6	-1.9	139	0.9	-0.6	0.7	226	2.9	2.1	2.0	176	2.9	-0.2	2.9
31	40	3.3	-2.1	-2.5	72	2.8	-2.7	-0.9	82	3.7	-3.7	-0.5	69	6.3	-5.9	-2.3	275	2.2	2.2	-0.2	260	4.1	4.0	0.7	285	3.4	3.3	-0.9

Daily Normals of Upper Air Winds (1971-2000)

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MINICOY

FEBRUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	36	3.6	-2.1	-2.9	78	3.5	-3.4	-0.7	88	2.7	-2.7	-0.1	72	3.6	-3.4	-1.1	272	2.9	2.9	-0.1	227	5.2	3.8	3.5	214	0.4	0.2	0.3			
2	40	3.9	-2.5	-3.0	76	3.4	-3.3	-0.8	96	2.8	-2.8	0.3	83	3.9	-3.9	-0.5	216	2.2	1.3	1.8	170	3.6	-0.6	3.5	270	0.5	0.5	0.0			
3	53	4.6	-3.7	-2.8	82	3.4	-3.4	-0.5	73	2.1	-2.0	-0.6	108	3.2	-3.0	1.0	293	1.5	1.4	-0.6	202	5.1	1.9	4.7	31	2.1	-1.1	-1.8			
4	64	4.1	-3.7	-1.8	79	3.7	-3.6	-0.7	95	2.2	-2.2	0.2	70	2.0	-1.9	-0.7	230	1.6	1.2	1.0	243	3.4	3.0	1.5	283	0.9	0.9	-0.2			
5	58	3.9	-3.3	-2.1	78	3.9	-3.8	-0.8	62	1.9	-1.7	-0.9	20	1.5	-0.5	-1.4	175	2.5	-0.2	2.5	237	3.7	3.1	2.0	69	4.4	-4.1	-1.6			
6	35	6.7	-3.9	-5.5	81	4.4	-4.3	-0.7	81	2.4	-2.4	-0.4	17	1.7	-0.5	-1.6	221	3.5	2.3	2.6	247	6.0	5.5	2.3	341	4.0	1.3	-3.8			
7	35	4.7	-2.7	-3.8	71	4.2	-4.0	-1.4	68	1.6	-1.5	-0.6	62	1.5	-1.3	-0.7	202	5.7	2.1	5.3	206	4.3	1.9	3.9	150	5.6	-2.8	4.8			
8	10	5.0	-0.9	-4.9	78	3.8	-3.7	-0.8	72	2.3	-2.2	-0.7	60	3.6	-3.1	-1.8	245	4.7	4.3	2.0	235	4.5	3.7	2.6	90	2.7	-2.7	0.0			
9	24	4.9	-2.0	-4.5	68	4.6	-4.3	-1.7	69	0.9	-0.8	-0.3	67	3.9	-3.6	-1.5	274	4.4	4.4	-0.3	260	5.6	5.5	1.0	172	2.8	-0.4	2.8			
10	13	3.5	-0.8	-3.4	63	3.8	-3.4	-1.7	75	3.1	-3.0	-0.8	63	3.3	-2.9	-1.5	272	2.3	2.3	-0.1	246	3.4	3.1	1.4	265	2.3	2.3	0.2			
11	43	3.4	-2.3	-2.5	80	5.0	-4.9	-0.9	76	3.4	-3.3	-0.8	86	3.2	-3.2	-0.2	292	1.1	1.0	-0.4	197	3.4	1.0	3.2	104	3.3	-3.2	0.8			
12	51	3.2	-2.5	-2.0	74	3.7	-3.6	-1.0	56	2.7	-2.2	-1.5	59	3.7	-3.2	-1.9	150	2.2	-1.1	1.9	175	5.0	-0.4	5.0	207	1.6	0.7	1.4			
13	33	3.0	-1.6	-2.5	57	3.1	-2.6	-1.7	58	1.3	-1.1	-0.7	88	3.0	-3.0	-0.1	156	1.7	-0.7	1.6	162	7.3	-2.3	6.9	97	3.2	-3.2	0.4			
14	17	2.8	-0.8	-2.7	74	2.5	-2.4	-0.7	99	0.6	-0.6	0.1	81	2.5	-2.5	-0.4	173	3.3	-0.4	3.3	166	8.3	-2.0	8.1	150	3.2	-1.6	2.8			
15	20	5.0	-1.7	-4.7	63	3.4	-3.0	-1.5	85	1.1	-1.1	-0.1	105	4.2	-4.1	1.1	142	2.9	-1.8	2.3	139	6.8	-4.5	5.1	121	3.9	-3.3	2.0			
16	19	4.3	-1.4	-4.1	70	3.0	-2.8	-1.0	68	1.1	-1.0	-0.4	134	3.2	-2.3	2.2	122	4.6	-3.9	2.4	147	7.2	-3.9	6.0	99	6.6	-6.5	1.0			
17	23	4.7	-1.8	-4.3	67	4.1	-3.8	-1.6	76	2.5	-2.4	-0.6	77	3.9	-3.8	-0.9	133	4.1	-3.0	2.8	146	9.7	-5.4	8.0	122	2.6	-2.2	1.4			
18	25	4.2	-1.8	-3.8	79	3.8	-3.7	-0.7	88	3.4	-3.4	-0.1	75	4.2	-4.1	-1.1	149	2.7	-1.4	2.3	133	5.7	-4.2	3.9	101	7.9	-7.8	1.5			
19	5	5.3	-0.5	-5.3	74	2.9	-2.8	-0.8	98	2.9	-2.9	0.4	75	5.0	-4.8	-1.3	102	3.9	-3.8	0.8	126	8.6	-7.0	5.0	74	5.0	-4.8	-1.4			
20	13	3.9	-0.9	-3.8	70	3.0	-2.8	-1.0	80	3.6	-3.5	-0.6	69	4.3	-4.0	-1.5	113	2.1	-1.9	0.8	156	7.9	-3.2	7.2	106	6.3	-6.1	1.7			
21	50	2.3	-1.8	-1.5	84	3.8	-3.8	-0.4	97	3.8	-3.8	0.5	68	2.9	-2.7	-1.1	119	2.3	-2.0	1.1	149	7.9	-4.1	6.8	128	5.0	-3.9	3.1			
22	42	3.6	-2.4	-2.7	68	4.2	-3.9	-1.6	82	4.4	-4.4	-0.6	80	5.1	-5.0	-0.9	94	2.6	-2.6	0.2	146	5.4	-3.0	4.5	79	2.5	-2.5	-0.5			
23	41	3.7	-2.4	-2.8	88	4.6	-4.6	-0.2	88	2.8	-2.8	-0.1	77	3.5	-3.4	-0.8	145	1.6	-0.9	1.3	137	5.1	-3.5	3.7	134	4.2	-3.0	2.9			
24	47	5.1	-3.7	-3.5	77	5.0	-4.9	-1.1	87	3.9	-3.9	-0.2	81	3.7	-3.7	-0.6	166	0.8	-0.2	0.8	152	4.3	-2.0	3.8	96	7.9	-7.9	0.8			
25	16	3.6	-1.0	-3.5	75	4.1	-4.0	-1.1	98	2.9	-2.9	0.4	86	4.0	-4.0	-0.3	158	2.4	-0.9	2.2	147	2.7	-1.5	2.3	110	3.0	-2.8	1.0			
26	14	4.4	-1.1	-4.3	64	4.1	-3.7	-1.8	58	3.1	-2.6	-1.6	84	3.6	-3.6	-0.4	195	2.7	0.7	2.6	177	3.6	-0.2	3.6	88	4.7	-4.7	-0.2			
27	25	4.0	-1.7	-3.6	79	3.3	-3.2	-0.6	85	2.1	-2.1	-0.2	89	4.0	-4.0	-0.1	203	3.6	1.4	3.3	163	2.1	-0.6	2.0	139	2.0	-1.3	1.5			
28	43	4.5	-3.1	-3.3	86	4.3	-4.3	-0.3	74	3.2	-3.1	-0.9	76	3.3	-3.2	-0.8	216	0.9	0.5	0.7	164	1.5	-0.4	1.4	110	5.8	-5.4	2.0			
29	45	2.4	-1.7	-1.7	90	3.9	-3.9	0.0	119	6.5	-5.7	3.1	94	8.2	-8.2	0.6	137	1.9	-1.3	1.4	124	13.5	-11.2	7.6	124	13.8	-11.5	7.7			

Daily Normals of Upper Air Winds (1971-2000)

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MINICOY

MARCH

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	34	4.0	-2.2	-3.3	72	4.9	-4.7	-1.5	90	3.4	-3.4	0.0	79	4.2	-4.1	-0.8	84	1.8	-1.8	-0.2	186	3.1	0.3	3.1	68	3.1	-2.9	-1.2			
2	27	3.8	-1.7	-3.4	78	4.2	-4.1	-0.9	79	3.8	-3.7	-0.7	72	4.0	-3.8	-1.2	8	1.5	-0.2	-1.5	201	2.2	0.8	2.1	68	2.2	-2.0	-0.8			
3	34	4.0	-2.2	-3.3	75	4.6	-4.4	-1.2	76	4.1	-4.0	-1.0	76	3.8	-3.7	-0.9	102	1.9	-1.9	0.4	185	3.6	0.3	3.6	103	2.3	-2.2	0.5			
4	48	4.8	-3.6	-3.2	78	5.0	-4.9	-1.0	68	4.0	-3.7	-1.5	65	4.5	-4.1	-1.9	225	0.4	0.3	0.3	150	3.2	-1.6	2.8	107	6.7	-6.4	2.0			
5	32	4.1	-2.2	-3.5	68	4.8	-4.5	-1.8	81	4.4	-4.3	-0.7	85	4.8	-4.8	-0.4	347	0.9	0.2	-0.9	171	3.2	-0.5	3.2	191	2.1	0.4	2.1			
6	9	4.3	-0.7	-4.2	82	4.1	-4.1	-0.6	103	2.8	-2.7	0.6	106	4.7	-4.5	1.3	76	0.8	-0.8	-0.2	120	1.4	-1.2	0.7	330	1.4	0.7	-1.2			
7	25	4.1	-1.7	-3.7	68	4.1	-3.8	-1.5	90	2.9	-2.9	0.0	109	3.6	-3.4	1.2	333	0.9	0.4	-0.8	192	1.4	0.3	1.4	112	5.7	-5.3	2.1			
8	12	2.9	-0.6	-2.8	69	3.4	-3.2	-1.2	59	2.7	-2.3	-1.4	73	3.1	-3.0	-0.9	315	1.4	1.0	-1.0	233	0.5	0.4	0.3	94	3.2	-3.2	0.2			
9	6	3.0	-0.3	-3.0	68	3.8	-3.5	-1.4	67	3.8	-3.5	-1.5	71	4.0	-3.8	-1.3	294	1.2	1.1	-0.5	218	2.9	1.8	2.3	98	6.7	-6.6	0.9			
10	34	2.9	-1.6	-2.4	84	4.1	-4.1	-0.4	85	4.5	-4.5	-0.4	74	2.6	-2.5	-0.7	326	0.7	0.4	-0.6	191	1.6	0.3	1.6	108	2.0	-1.9	0.6			
11	44	2.8	-1.9	-2.0	78	4.0	-3.9	-0.8	91	4.4	-4.4	0.1	80	2.7	-2.7	-0.5	135	0.4	-0.3	0.3	180	1.7	0.0	1.7	106	6.8	-6.5	1.9			
12	33	2.7	-1.5	-2.3	74	4.6	-4.4	-1.3	69	5.3	-5.0	-1.9	77	4.1	-4.0	-0.9	308	1.1	0.9	-0.7	235	3.2	2.6	1.8	117	4.0	-3.6	1.8			
13	9	3.7	-0.6	-3.7	78	5.1	-5.0	-1.1	56	4.8	-4.0	-2.7	81	4.7	-4.6	-0.7	303	1.7	1.4	-0.9	268	2.7	2.7	0.1	129	3.6	-2.8	2.3			
14	356	4.2	0.3	-4.2	66	3.9	-3.6	-1.6	67	7.4	-6.8	-2.9	73	5.8	-5.5	-1.7	279	1.2	1.2	-0.2	220	1.7	1.1	1.3	132	2.8	-2.1	1.9			
15	356	3.1	0.2	-3.1	71	4.2	-4.0	-1.4	78	6.1	-6.0	-1.3	88	6.0	-6.0	-0.2	27	0.2	-0.1	-0.2	224	7.4	5.1	5.3	131	5.3	-4.0	3.5			
16	19	3.6	-1.2	-3.4	83	4.8	-4.8	-0.6	78	5.8	-5.7	-1.2	77	5.5	-5.4	-1.2	232	3.7	2.9	2.3	233	5.9	4.7	3.6	105	3.8	-3.7	1.0			
17	26	3.0	-1.3	-2.7	82	4.5	-4.5	-0.6	81	5.8	-5.7	-0.9	92	4.9	-4.9	0.2	243	3.4	3.0	1.5	225	5.1	3.6	3.6	90	0.3	-0.3	0.0			
18	16	4.0	-1.1	-3.8	78	5.4	-5.3	-1.1	78	6.9	-6.8	-1.4	88	5.3	-5.3	-0.2	216	2.9	1.7	2.3	234	3.9	3.2	2.3	131	4.4	-3.3	2.9			
19	8	4.9	-0.7	-4.9	74	4.7	-4.5	-1.3	81	8.1	-8.0	-1.2	92	3.8	-3.8	0.1	221	2.0	1.3	1.5	304	2.7	2.2	-1.5	148	4.9	-2.6	4.2			
20	18	3.5	-1.1	-3.3	70	4.0	-3.8	-1.4	75	6.9	-6.7	-1.8	81	4.7	-4.6	-0.7	243	1.6	1.4	0.7	248	4.2	3.9	1.6	5	1.1	-0.1	-1.1			
21	15	2.8	-0.7	-2.7	69	4.0	-3.7	-1.4	82	7.7	-7.6	-1.1	78	5.4	-5.3	-1.1	257	2.7	2.6	0.6	237	5.9	4.9	3.2	95	3.4	-3.4	0.3			
22	3	3.7	-0.2	-3.7	77	4.3	-4.2	-1.0	76	9.0	-8.7	-2.2	70	3.2	-3.0	-1.1	233	3.5	2.8	2.1	242	5.2	4.6	2.4	140	3.0	-1.9	2.3			
23	29	1.8	-0.9	-1.6	75	4.2	-4.1	-1.1	80	6.5	-6.4	-1.1	69	3.9	-3.6	-1.4	252	3.6	3.4	1.1	226	7.6	5.5	5.3	135	1.6	-1.1	1.1			
24	28	1.5	-0.7	-1.3	70	4.5	-4.2	-1.5	77	7.2	-7.0	-1.6	62	4.3	-3.8	-2.0	255	5.4	5.2	1.4	249	5.3	4.9	1.9	142	3.1	-1.9	2.4			
25	42	1.5	-1.0	-1.1	63	4.2	-3.7	-1.9	83	6.6	-6.6	-0.8	78	1.4	-1.4	-0.3	272	5.2	5.2	-0.2	241	5.1	4.5	2.5	32	2.6	-1.4	-2.2			
26	317	1.6	1.1	-1.2	73	4.5	-4.3	-1.3	74	5.5	-5.3	-1.5	48	2.4	-1.8	-1.6	266	3.9	3.9	0.3	233	6.9	5.5	4.2	39	4.5	-2.8	-3.5			
27	339	3.6	1.3	-3.4	76	3.4	-3.3	-0.8	82	5.8	-5.7	-0.8	42	4.7	-3.2	-3.5	252	3.6	3.4	1.1	228	6.4	4.8	4.3	119	5.4	-4.7	2.6			
28	340	3.5	1.2	-3.3	75	4.1	-4.0	-1.1	77	5.3	-5.2	-1.2	58	5.2	-4.4	-2.8	259	1.6	1.6	0.3	217	4.6	2.8	3.7	121	7.4	-6.4	3.8			
29	336	3.6	1.5	-3.3	66	3.0	-2.7	-1.2	80	6.3	-6.2	-1.1	63	5.3	-4.7	-2.4	198	0.3	0.1	0.3	178	4.6	-0.2	4.6	102	6.2	-6.1	1.3			
30	315	1.6	1.1	-1.1	70	3.5	-3.3	-1.2	90	5.5	-5.5	0.0	77	4.1	-4.0	-0.9	124	1.8	-1.5	1.0	222	3.8	2.5	2.8	102	6.6	-6.4	1.4			
31	305	3.7	3.0	-2.1	78	3.3	-3.2	-0.7	74	6.5	-6.2	-1.8	80	4.5	-4.4	-0.8	172	4.1	-0.6	4.1	194	4.6	1.1	4.5	107	5.8	-5.5	1.7			

Daily Normals of Upper Air Winds (1971-2000)

MINICOY

APRIL

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	318	4.6	3.1	-3.4	43	3.7	-2.5	-2.7	66	6.7	-6.1	-2.7	91	3.9	-3.9	0.1	170	2.8	-0.5	2.8	174	7.2	-0.8	7.2	114	6.0	-5.5	2.5
2	336	3.9	1.6	-3.6	51	3.2	-2.5	-2.0	74	6.9	-6.6	-1.9	90	4.4	-4.4	0.0	202	4.2	1.6	3.9	189	6.8	1.1	6.7	111	5.6	-5.2	2.0
3	16	2.5	-0.7	-2.4	80	2.2	-2.2	-0.4	80	6.9	-6.8	-1.2	95	2.4	-2.4	0.2	195	5.1	1.3	4.9	170	5.1	-0.9	5.0	81	9.6	-9.5	-1.5
4	329	0.6	0.3	-0.5	58	2.6	-2.2	-1.4	72	6.4	-6.1	-2.0	62	1.9	-1.7	-0.9	197	2.4	0.7	2.3	165	5.8	-1.5	5.6	102	8.4	-8.2	1.7
5	42	1.2	-0.8	-0.9	63	2.7	-2.4	-1.2	75	6.2	-6.0	-1.6	87	3.3	-3.3	-0.2	216	2.7	1.6	2.2	163	8.3	-2.4	7.9	108	10.0	-9.5	3.0
6	54	1.4	-1.1	-0.8	48	2.7	-2.0	-1.8	80	5.8	-5.7	-1.0	69	3.4	-3.2	-1.2	307	0.5	0.4	-0.3	168	4.0	-0.8	3.9	118	6.7	-5.9	3.2
7	35	2.1	-1.2	-1.7	62	3.2	-2.8	-1.5	85	5.9	-5.9	-0.5	67	4.3	-4.0	-1.7	124	2.7	-2.2	1.5	166	3.8	-0.9	3.7	96	4.5	-4.5	0.5
8	360	1.9	0.0	-1.9	55	3.3	-2.7	-1.9	73	6.7	-6.4	-1.9	70	4.9	-4.6	-1.7	117	4.4	-3.9	2.0	154	6.1	-2.7	5.5	126	4.1	-3.3	2.4
9	321	2.2	1.4	-1.7	62	3.0	-2.6	-1.4	75	7.3	-7.0	-1.9	73	4.7	-4.5	-1.4	126	2.6	-2.1	1.5	159	3.9	-1.4	3.6	104	6.8	-6.6	1.7
10	327	2.4	1.3	-2.0	57	2.7	-2.3	-1.5	74	6.9	-6.6	-1.9	90	4.7	-4.7	0.0	77	1.3	-1.3	-0.3	140	5.0	-3.2	3.8	103	6.9	-6.7	1.6
11	297	2.5	2.2	-1.1	39	1.4	-0.9	-1.1	70	7.3	-6.9	-2.5	85	5.2	-5.2	-0.5	97	4.1	-4.1	0.5	97	2.4	-2.4	0.3	100	8.1	-8.0	1.4
12	324	3.1	1.8	-2.5	17	1.7	-0.5	-1.6	67	6.5	-6.0	-2.6	79	5.3	-5.2	-1.0	85	4.2	-4.2	-0.4	122	4.6	-3.9	2.4	119	5.6	-4.9	2.7
13	319	3.5	2.3	-2.6	69	1.4	-1.3	-0.5	75	5.7	-5.5	-1.5	94	4.7	-4.7	0.3	108	1.9	-1.8	0.6	139	4.4	-2.9	3.3	59	0.6	-0.5	-0.3
14	325	2.8	1.6	-2.3	75	1.6	-1.5	-0.4	77	6.2	-6.0	-1.4	87	3.3	-3.3	-0.2	153	0.2	-0.1	0.2	180	2.1	0.0	2.1	163	1.0	-0.3	1.0
15	324	3.4	2.0	-2.8	27	0.9	-0.4	-0.8	71	6.5	-6.2	-2.1	88	3.8	-3.8	-0.1	225	2.3	1.6	1.6	207	5.1	2.3	4.5	97	3.4	-3.4	0.4
16	306	2.2	1.8	-1.3	10	1.1	-0.2	-1.1	82	6.3	-6.2	-0.9	71	3.6	-3.4	-1.2	241	2.5	2.2	1.2	224	5.8	4.0	4.2	115	7.9	-7.2	3.3
17	339	2.8	1.0	-2.6	19	2.1	-0.7	-2.0	79	7.6	-7.4	-1.5	71	2.8	-2.6	-0.9	270	1.7	1.7	0.0	192	6.2	1.3	6.1	130	4.5	-3.5	2.9
18	313	2.3	1.7	-1.6	57	1.7	-1.4	-0.9	75	7.8	-7.5	-2.0	87	4.2	-4.2	-0.2	254	2.5	2.4	0.7	242	7.5	6.6	3.5	81	1.9	-1.9	-0.3
19	335	2.6	1.1	-2.4	47	2.1	-1.5	-1.4	80	8.1	-8.0	-1.4	81	3.2	-3.2	-0.5	227	4.8	3.5	3.3	219	9.1	5.7	7.1	99	7.6	-7.5	1.2
20	350	3.6	0.6	-3.5	25	1.4	-0.6	-1.3	81	6.7	-6.6	-1.0	93	3.5	-3.5	0.2	247	5.9	5.4	2.3	232	7.8	6.2	4.8	100	1.1	-1.1	0.2
21	326	4.7	2.6	-3.9	32	1.3	-0.7	-1.1	75	6.9	-6.7	-1.8	93	3.8	-3.8	0.2	249	3.6	3.4	1.3	238	7.0	5.9	3.7	110	5.2	-4.9	1.8
22	324	4.2	2.5	-3.4	25	1.7	-0.7	-1.5	68	7.7	-7.1	-2.9	109	2.8	-2.6	0.9	252	2.9	2.8	0.9	226	6.4	4.6	4.4	106	9.1	-8.7	2.5
23	339	2.5	0.9	-2.3	9	1.2	-0.2	-1.2	83	6.1	-6.1	-0.7	62	1.5	-1.3	-0.7	252	5.9	5.6	1.8	246	10.7	9.8	4.3	88	6.5	-6.5	-0.2
24	307	4.3	3.4	-2.6	13	1.8	-0.4	-1.8	73	5.9	-5.6	-1.7	45	0.1	-0.1	-0.1	259	5.1	5.0	1.0	216	4.6	2.7	3.7	117	4.2	-3.8	1.9
25	319	4.9	3.2	-3.7	331	1.0	0.5	-0.9	64	6.6	-5.9	-2.9	23	2.3	-0.9	-2.1	280	2.9	2.9	-0.5	231	4.6	3.6	2.9	94	9.0	-9.0	0.6
26	329	4.3	2.2	-3.7	13	2.2	-0.5	-2.1	79	7.1	-7.0	-1.4	37	3.4	-2.0	-2.7	273	2.0	2.0	-0.1	191	5.4	1.0	5.3	117	7.1	-6.3	3.2
27	345	1.6	0.4	-1.5	27	2.5	-1.1	-2.2	75	6.0	-5.8	-1.6	37	3.8	-2.3	-3.0	265	1.1	1.1	0.1	195	5.6	1.4	5.4	108	7.4	-7.0	2.3
28	329	3.1	1.6	-2.7	9	1.3	-0.2	-1.3	79	5.7	-5.6	-1.1	62	4.1	-3.6	-1.9	299	2.5	2.2	-1.2	162	5.5	-1.7	5.2	107	8.4	-8.0	2.5
29	334	3.9	1.7	-3.5	16	1.9	-0.5	-1.8	78	5.5	-5.4	-1.1	60	2.4	-2.1	-1.2	59	1.2	-1.0	-0.6	167	4.0	-0.9	3.9	117	7.3	-6.5	3.3
30	331	3.8	1.8	-3.3	348	2.5	0.5	-2.4	73	5.7	-5.4	-1.7	36	2.2	-1.3	-1.8	72	0.3	-0.3	-0.1	155	5.9	-2.5	5.3	100	10.8	-10.6	1.8

Daily Normals of Upper Air Winds (1971-2000)

MINICOY

MAY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	310	4.5	3.4	-2.9	329	2.6	1.3	-2.2	63	5.1	-4.6	-2.3	54	1.7	-1.4	-1.0	225	0.8	0.6	0.6	155	2.9	-1.2	2.6	111	6.4	-6.0	2.3
2	327	5.5	3.0	-4.6	325	3.5	2.0	-2.9	64	4.1	-3.7	-1.8	49	2.8	-2.1	-1.8	252	0.9	0.9	0.3	153	5.6	-2.5	5.0	101	9.8	-9.6	1.9
3	328	3.9	2.1	-3.3	345	2.3	0.6	-2.2	78	4.4	-4.3	-0.9	49	0.9	-0.7	-0.6	168	2.5	-0.5	2.4	157	4.4	-1.7	4.1	94	9.0	-9.0	0.6
4	309	4.0	3.1	-2.5	327	2.4	1.3	-2.0	72	4.7	-4.5	-1.5	72	2.0	-1.9	-0.6	172	2.1	-0.3	2.1	120	7.2	-6.2	3.6	92	11.2	-11.2	0.4
5	325	2.8	1.6	-2.3	321	3.3	2.1	-2.6	72	4.2	-4.0	-1.3	18	1.3	-0.4	-1.2	158	2.4	-0.9	2.2	127	7.7	-6.2	4.6	102	10.7	-10.5	2.3
6	292	5.2	4.8	-1.9	315	3.5	2.5	-2.5	46	3.2	-2.3	-2.2	7	0.8	-0.1	-0.8	180	1.2	0.0	1.2	126	4.2	-3.4	2.5	94	10.8	-10.8	0.8
7	294	3.7	3.4	-1.5	341	2.4	0.8	-2.3	71	4.2	-4.0	-1.4	69	1.9	-1.8	-0.7	111	1.4	-1.3	0.5	145	4.9	-2.8	4.0	95	8.4	-8.4	0.8
8	292	6.8	6.3	-2.5	307	3.0	2.4	-1.8	81	5.6	-5.5	-0.9	81	2.6	-2.6	-0.4	133	2.5	-1.8	1.7	115	4.7	-4.3	2.0	76	10.7	-10.4	-2.5
9	302	6.5	5.5	-3.4	313	4.0	2.9	-2.7	71	5.9	-5.6	-1.9	51	2.1	-1.6	-1.3	110	2.0	-1.9	0.7	115	7.4	-6.7	3.1	106	8.5	-8.2	2.4
10	303	7.4	6.2	-4.1	320	4.5	2.9	-3.4	63	4.4	-3.9	-2.0	73	1.0	-1.0	-0.3	120	1.4	-1.2	0.7	124	5.5	-4.6	3.1	94	12.5	-12.5	0.9
11	300	6.4	5.6	-3.2	330	5.3	2.7	-4.6	59	5.0	-4.3	-2.6	49	2.0	-1.5	-1.3	104	1.2	-1.2	0.3	111	2.5	-2.3	0.9	103	7.4	-7.2	1.6
12	296	5.5	4.9	-2.4	312	2.5	1.9	-1.7	62	3.2	-2.8	-1.5	77	0.9	-0.9	-0.2	151	1.3	-0.6	1.1	127	4.9	-3.9	2.9	103	9.4	-9.2	2.1
13	303	7.7	6.5	-4.2	303	3.7	3.1	-2.0	46	3.2	-2.3	-2.2	90	1.0	-1.0	0.0	59	1.2	-1.0	-0.6	120	6.8	-5.9	3.4	96	12.5	-12.4	1.2
14	292	7.7	7.1	-2.9	292	4.0	3.7	-1.5	67	3.4	-3.1	-1.3	99	1.3	-1.3	0.2	120	2.2	-1.9	1.1	107	8.6	-8.2	2.5	95	13.2	-13.1	1.2
15	286	4.5	4.3	-1.2	296	3.9	3.5	-1.7	27	1.3	-0.6	-1.2	270	0.9	0.9	0.0	135	0.4	-0.3	0.3	113	6.5	-6.0	2.6	102	15.3	-14.9	3.3
16	281	6.7	6.6	-1.3	283	3.6	3.5	-0.8	180	0.1	0.0	0.1	232	1.1	0.9	0.7	117	0.9	-0.8	0.4	111	5.0	-4.7	1.8	106	8.8	-8.5	2.4
17	278	7.3	7.2	-1.0	279	5.5	5.4	-0.9	253	1.7	1.6	0.5	225	0.8	0.6	0.6	112	2.7	-2.5	1.0	112	8.8	-8.2	3.3	72	9.9	-9.4	-3.1
18	278	8.2	8.1	-1.1	292	5.5	5.1	-2.1	342	2.0	0.6	-1.9	337	0.8	0.3	-0.7	141	2.1	-1.3	1.6	108	6.7	-6.4	2.1	78	9.4	-9.2	-1.9
19	297	5.7	5.1	-2.6	297	4.6	4.1	-2.1	4	2.6	-0.2	-2.6	6	1.0	-0.1	-1.0	117	0.4	-0.4	0.2	96	4.0	-4.0	0.4	103	13.1	-12.8	3.0
20	296	6.8	6.1	-3.0	302	4.7	4.0	-2.5	2	2.7	-0.1	-2.7	321	1.9	1.2	-1.5	360	0.1	0.0	-0.1	108	5.2	-5.0	1.6	100	16.3	-16.1	2.7
21	309	6.8	5.3	-4.3	304	5.3	4.4	-3.0	354	3.6	0.4	-3.6	302	3.9	3.3	-2.1	151	2.1	-1.0	1.8	106	7.4	-7.1	2.0	94	9.4	-9.4	0.7
22	287	5.3	5.1	-1.6	298	5.2	4.6	-2.4	48	3.0	-2.2	-2.0	303	2.4	2.0	-1.3	141	2.2	-1.4	1.7	104	5.6	-5.4	1.3	96	12.5	-12.4	1.4
23	284	4.4	4.3	-1.1	303	4.5	3.8	-2.5	49	2.1	-1.6	-1.4	337	2.8	1.1	-2.6	90	1.7	-1.7	0.0	107	6.7	-6.4	2.0	94	16.2	-16.2	1.0
24	288	9.0	8.6	-2.8	285	5.8	5.6	-1.5	293	1.5	1.4	-0.6	342	2.0	0.6	-1.9	55	2.1	-1.7	-1.2	106	6.0	-5.8	1.7	100	19.9	-19.6	3.4
25	294	8.7	7.9	-3.6	289	6.9	6.5	-2.3	288	2.5	2.4	-0.8	295	4.3	3.9	-1.8	11	1.5	-0.3	-1.5	101	10.5	-10.3	2.0	104	25.0	-24.2	6.1
26	280	7.9	7.8	-1.4	284	6.9	6.7	-1.7	313	1.9	1.4	-1.3	292	2.9	2.7	-1.1	34	1.4	-0.8	-1.2	97	7.9	-7.8	1.0	103	18.2	-17.7	4.2
27	287	7.0	6.7	-2.0	296	6.4	5.8	-2.8	336	3.0	1.2	-2.7	312	1.3	1.0	-0.9	100	3.5	-3.4	0.6	75	9.5	-9.2	-2.5	99	20.8	-20.6	3.2
28	289	8.4	8.0	-2.7	288	7.4	7.0	-2.3	294	3.0	2.7	-1.2	279	1.9	1.9	-0.3	40	4.5	-2.9	-3.4	91	10.3	-10.3	0.1	98	15.5	-15.3	2.2
29	294	9.4	8.6	-3.8	293	7.3	6.7	-2.9	299	3.7	3.2	-1.8	291	3.3	3.1	-1.2	126	3.4	-2.8	2.0	115	8.9	-8.0	3.8	97	14.8	-14.7	1.9
30	282	10.7	10.5	-2.3	287	8.8	8.4	-2.5	295	5.4	4.9	-2.3	280	2.2	2.2	-0.4	110	1.2	-1.1	0.4	88	8.4	-8.4	-0.3	98	20.7	-20.5	2.9
31	290	9.7	9.1	-3.3	290	7.0	6.6	-2.4	284	4.4	4.3	-1.1	264	2.8	2.8	0.3	98	2.2	-2.2	0.3	86	9.5	-9.5	-0.6	91	18.0	-18.0	0.3

Daily Normals of Upper Air Winds (1971-2000)

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MINICOY

JUNE

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	288	10.8	10.2	-3.4	285	9.0	8.7	-2.4	280	3.9	3.8	-0.7	275	3.3	3.3	-0.3	84	5.0	-5.0	-0.5	86	10.9	-10.9	-0.7	94	23.2	-23.1	1.7			
2	268	11.0	11.0	0.3	284	9.3	9.0	-2.3	286	5.2	5.0	-1.4	268	2.8	2.8	0.1	97	5.0	-5.0	0.6	84	11.5	-11.4	-1.2	102	20.0	-19.5	4.3			
3	273	9.6	9.6	-0.5	283	8.7	8.5	-1.9	277	7.0	6.9	-0.9	263	3.4	3.4	0.4	75	3.0	-2.9	-0.8	80	9.5	-9.4	-1.6	98	18.6	-18.4	2.7			
4	274	9.0	9.0	-0.6	283	10.7	10.4	-2.4	277	6.6	6.6	-0.8	260	5.0	4.9	0.9	67	4.7	-4.3	-1.8	80	11.5	-11.3	-1.9	95	27.4	-27.3	2.3			
5	279	11.9	11.7	-1.9	286	11.2	10.8	-3.1	282	7.9	7.7	-1.7	272	6.7	6.7	-0.2	82	2.7	-2.7	-0.4	73	13.2	-12.6	-3.9	89	21.0	-21.0	-0.2			
6	265	10.0	10.0	0.9	281	11.5	11.3	-2.1	276	8.5	8.5	-0.9	270	6.8	6.8	0.0	82	5.3	-5.3	-0.7	86	15.5	-15.5	-1.0	96	27.5	-27.3	3.1			
7	275	10.9	10.9	-0.9	284	12.6	12.2	-3.1	283	10.1	9.8	-2.3	272	7.2	7.2	-0.2	73	5.8	-5.5	-1.7	79	15.2	-14.9	-3.0	99	22.2	-22.0	3.3			
8	270	12.2	12.2	0.0	282	12.4	12.1	-2.5	279	10.5	10.4	-1.6	272	5.1	5.1	-0.2	68	5.6	-5.2	-2.1	84	14.4	-14.3	-1.5	98	30.9	-30.6	4.4			
9	281	14.3	14.0	-2.8	283	12.1	11.8	-2.7	279	11.3	11.2	-1.8	280	5.6	5.5	-1.0	81	6.5	-6.4	-1.0	85	18.4	-18.3	-1.7	92	25.0	-25.0	0.9			
10	276	14.4	14.3	-1.6	288	14.1	13.4	-4.3	281	10.3	10.1	-1.9	279	6.1	6.0	-1.0	82	6.5	-6.4	-0.9	89	18.8	-18.8	-0.4	90	25.5	-25.5	-0.1			
11	285	14.4	13.9	-3.6	290	13.5	12.7	-4.5	293	10.4	9.6	-4.0	272	6.3	6.3	-0.2	78	6.3	-6.2	-1.3	82	17.8	-17.6	-2.5	91	27.5	-27.5	0.6			
12	282	14.9	14.6	-3.0	290	14.6	13.7	-5.0	284	11.0	10.7	-2.6	293	7.4	6.8	-2.9	88	6.5	-6.5	-0.2	90	19.8	-19.8	0.0	94	25.8	-25.7	2.0			
13	280	14.8	14.6	-2.5	295	13.6	12.3	-5.8	286	10.4	10.0	-2.8	286	9.1	8.7	-2.5	84	6.4	-6.4	-0.7	92	22.3	-22.3	0.9	93	27.2	-27.2	1.4			
14	280	13.7	13.5	-2.5	291	13.6	12.7	-5.0	285	9.9	9.6	-2.5	274	8.7	8.7	-0.6	83	7.9	-7.8	-1.0	79	20.1	-19.7	-3.8	104	20.8	-20.2	5.1			
15	281	12.9	12.7	-2.4	284	14.5	14.0	-3.6	277	12.3	12.2	-1.5	261	7.6	7.5	1.2	88	8.4	-8.4	-0.3	80	21.2	-20.9	-3.6	92	27.1	-27.1	0.8			
16	283	12.5	12.2	-2.9	282	13.8	13.5	-2.9	280	12.2	12.0	-2.2	269	6.5	6.5	0.1	91	6.4	-6.4	0.1	79	22.4	-22.0	-4.4	95	33.2	-33.1	3.0			
17	278	13.2	13.1	-1.8	285	14.8	14.3	-3.8	278	12.0	11.9	-1.6	270	8.2	8.2	0.0	81	6.3	-6.2	-1.0	91	22.0	-22.0	0.4	102	26.5	-25.9	5.7			
18	274	13.1	13.1	-0.9	284	15.0	14.6	-3.6	281	12.6	12.4	-2.3	270	8.1	8.1	0.0	78	11.5	-11.2	-2.4	81	21.6	-21.4	-3.2	91	27.4	-27.4	0.4			
19	270	13.2	13.2	0.0	287	13.6	13.0	-4.0	284	11.0	10.7	-2.7	271	8.1	8.1	-0.1	92	10.0	-10.0	0.4	84	22.3	-22.2	-2.4	89	29.2	-29.2	-0.5			
20	281	11.2	11.0	-2.1	290	14.0	13.1	-4.8	286	10.6	10.2	-2.9	278	6.3	6.2	-0.9	81	8.2	-8.1	-1.3	87	24.4	-24.4	-1.1	96	31.0	-30.8	3.5			
21	283	11.2	10.9	-2.6	291	12.7	11.9	-4.5	286	10.0	9.6	-2.8	270	6.5	6.5	0.0	84	8.2	-8.2	-0.8	89	23.4	-23.4	-0.6	97	32.5	-32.2	4.1			
22	292	12.0	11.1	-4.5	295	13.6	12.4	-5.7	284	11.3	10.9	-2.8	283	6.2	6.0	-1.4	91	9.0	-9.0	0.1	87	22.3	-22.3	-1.3	97	27.8	-27.6	3.5			
23	285	10.9	10.5	-2.8	289	14.0	13.3	-4.5	285	10.4	10.0	-2.7	275	4.9	4.9	-0.4	97	10.5	-10.4	1.3	90	24.7	-24.7	0.1	105	26.7	-25.8	7.0			
24	292	11.3	10.4	-4.3	289	14.2	13.4	-4.7	285	10.5	10.1	-2.7	251	4.3	4.1	1.4	98	9.2	-9.1	1.2	88	22.0	-22.0	-0.7	95	25.1	-25.0	2.2			
25	294	11.1	10.1	-4.5	288	14.0	13.3	-4.4	284	10.8	10.5	-2.6	264	7.3	7.3	0.8	79	8.1	-8.0	-1.5	85	24.0	-23.9	-1.9	93	33.1	-33.1	1.6			
26	288	10.8	10.3	-3.4	284	14.0	13.6	-3.4	284	11.5	11.2	-2.7	270	6.0	6.0	0.0	88	8.3	-8.3	-0.3	86	22.8	-22.7	-1.6	93	30.3	-30.3	1.6			
27	283	10.6	10.3	-2.4	286	12.9	12.4	-3.5	284	10.7	10.4	-2.5	266	6.9	6.9	0.5	88	6.3	-6.3	-0.2	89	22.1	-22.1	-0.5	91	34.5	-34.5	0.6			
28	274	9.7	9.7	-0.6	283	12.6	12.3	-2.9	282	11.1	10.9	-2.3	278	6.3	6.2	-0.9	91	8.3	-8.3	0.2	84	24.3	-24.1	-2.7	95	29.3	-29.2	2.7			
29	274	14.2	14.2	-0.9	288	14.3	13.6	-4.4	285	11.8	11.4	-3.1	280	5.1	5.0	-0.9	92	7.4	-7.4	0.2	90	23.3	-23.3	-0.2	94	30.7	-30.6	2.3			
30	278	11.8	11.7	-1.7	290	13.2	12.4	-4.5	287	9.7	9.3	-2.8	281	5.2	5.1	-1.0	83	8.8	-8.7	-1.0	90	20.6	-20.6	0.0	95	31.4	-31.3	2.6			

Daily Normals of Upper Air Winds (1971-2000)

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MINICOY

JULY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	277	12.7	12.6	-1.5	286	13.8	13.3	-3.8	285	11.1	10.7	-2.9	258	5.0	4.9	1.0	86	11.5	-11.5	-0.9	93	24.0	-24.0	1.1	94	36.0	-35.9	2.8			
2	284	12.1	11.7	-2.9	292	12.9	11.9	-4.9	279	10.8	10.7	-1.7	273	3.8	3.8	-0.2	95	9.4	-9.4	0.9	91	23.8	-23.8	0.5	97	25.9	-25.7	3.0			
3	285	13.1	12.7	-3.4	293	12.8	11.8	-5.0	281	10.7	10.5	-2.0	270	4.0	4.0	0.0	92	10.0	-10.0	0.4	85	27.5	-27.4	-2.3	94	35.6	-35.5	2.6			
4	289	14.5	13.7	-4.7	297	13.7	12.2	-6.3	288	9.5	9.0	-2.9	282	4.4	4.3	-0.9	95	11.4	-11.4	0.9	89	23.6	-23.6	-0.5	96	25.7	-25.5	2.8			
5	292	12.9	12.0	-4.8	292	13.3	12.4	-4.9	288	10.3	9.8	-3.1	277	4.6	4.6	-0.6	82	9.5	-9.4	-1.3	82	21.6	-21.4	-3.0	101	28.0	-27.5	5.1			
6	281	12.6	12.4	-2.3	291	13.1	12.2	-4.8	284	9.7	9.4	-2.3	261	5.9	5.8	0.9	79	12.7	-12.5	-2.4	82	22.8	-22.6	-3.2	95	29.0	-28.9	2.4			
7	286	13.0	12.5	-3.6	292	12.9	12.0	-4.8	288	11.7	11.1	-3.7	278	6.9	6.8	-1.0	84	11.1	-11.0	-1.1	89	27.4	-27.4	-0.5	97	22.5	-22.3	2.7			
8	286	11.8	11.3	-3.3	290	13.2	12.4	-4.5	291	10.5	9.8	-3.8	284	4.6	4.5	-1.1	94	10.2	-10.2	0.8	88	26.6	-26.6	-1.0	94	28.1	-28.0	2.1			
9	284	13.2	12.8	-3.1	291	14.4	13.5	-5.1	289	10.8	10.2	-3.5	269	4.1	4.1	0.1	93	11.5	-11.5	0.6	84	26.7	-26.5	-2.9	96	25.9	-25.7	2.9			
10	282	12.3	12.0	-2.6	291	13.2	12.3	-4.7	290	11.0	10.3	-3.8	281	4.1	4.0	-0.8	86	9.1	-9.1	-0.7	86	24.3	-24.2	-1.6	97	36.8	-36.5	4.4			
11	283	16.3	15.9	-3.8	290	12.9	12.1	-4.5	290	10.9	10.2	-3.7	278	5.2	5.2	-0.7	105	11.1	-10.7	2.8	85	21.7	-21.6	-1.8	97	30.4	-30.2	3.5			
12	277	14.3	14.2	-1.7	292	14.9	13.8	-5.6	285	11.0	10.6	-2.8	281	4.9	4.8	-0.9	89	9.1	-9.1	-0.2	87	21.6	-21.6	-1.3	97	32.1	-31.8	4.0			
13	283	14.4	14.0	-3.2	294	14.4	13.1	-5.9	288	10.2	9.7	-3.1	258	5.4	5.3	1.1	92	9.3	-9.3	0.3	85	22.1	-22.0	-1.8	94	31.5	-31.4	2.4			
14	285	15.1	14.6	-3.8	292	13.6	12.6	-5.2	287	10.7	10.2	-3.1	256	4.9	4.8	1.2	92	9.2	-9.2	0.4	85	24.7	-24.6	-2.1	97	27.9	-27.7	3.5			
15	284	15.9	15.4	-3.9	292	15.9	14.7	-6.0	287	12.2	11.7	-3.5	279	5.8	5.7	-0.9	78	9.7	-9.5	-2.1	90	24.4	-24.4	0.2	99	30.6	-30.2	4.7			
16	280	13.7	13.5	-2.3	292	14.5	13.4	-5.5	291	10.8	10.1	-3.8	286	6.6	6.4	-1.8	93	9.7	-9.7	0.5	89	20.9	-20.9	-0.4	106	30.4	-29.2	8.4			
17	286	14.2	13.7	-3.8	289	15.1	14.3	-4.8	284	11.5	11.2	-2.8	292	3.8	3.5	-1.4	107	6.8	-6.5	2.0	85	24.1	-24.0	-2.0	96	31.4	-31.2	3.5			
18	275	13.0	12.9	-1.2	293	13.8	12.7	-5.4	290	10.3	9.7	-3.5	270	3.7	3.7	0.0	100	9.3	-9.2	1.6	89	21.6	-21.6	-0.2	95	29.0	-28.9	2.5			
19	285	12.6	12.2	-3.3	294	14.2	13.0	-5.7	292	8.6	8.0	-3.2	273	5.0	5.0	-0.3	106	7.6	-7.3	2.1	93	21.7	-21.7	1.3	93	29.4	-29.4	1.4			
20	282	13.5	13.2	-2.7	292	14.8	13.7	-5.6	290	10.1	9.5	-3.4	273	3.5	3.5	-0.2	84	8.8	-8.8	-0.9	91	26.2	-26.2	0.5	91	35.3	-35.3	0.6			
21	290	11.1	10.4	-3.8	298	13.7	12.1	-6.5	293	10.0	9.2	-3.9	274	5.6	5.6	-0.4	102	10.7	-10.5	2.2	84	24.4	-24.3	-2.4	96	29.4	-29.2	3.1			
22	289	11.4	10.8	-3.8	295	13.8	12.5	-5.8	290	9.6	9.0	-3.2	264	3.0	3.0	0.3	94	9.5	-9.5	0.7	92	21.5	-21.5	0.7	96	22.7	-22.6	2.3			
23	289	12.1	11.4	-4.0	296	13.5	12.1	-6.0	293	8.8	8.1	-3.4	279	2.5	2.5	-0.4	88	9.4	-9.4	-0.3	88	23.0	-23.0	-1.0	99	26.9	-26.6	4.2			
24	280	12.1	11.9	-2.0	294	12.9	11.8	-5.2	291	9.9	9.2	-3.6	277	4.3	4.3	-0.5	96	9.7	-9.6	1.0	83	23.5	-23.3	-2.7	107	26.0	-24.8	7.7			
25	289	13.3	12.6	-4.4	296	13.8	12.4	-6.1	288	10.4	9.9	-3.2	263	4.6	4.6	0.6	89	8.3	-8.3	-0.2	85	23.0	-22.9	-2.2	98	31.5	-31.2	4.3			
26	280	11.9	11.7	-2.0	293	12.8	11.8	-5.0	284	10.2	9.9	-2.4	255	5.1	4.9	1.3	104	10.2	-9.9	2.4	89	24.0	-24.0	-0.6	100	22.7	-22.4	3.8			
27	285	11.3	10.9	-2.9	293	12.4	11.4	-4.8	288	10.3	9.8	-3.2	279	4.4	4.3	-0.7	89	10.1	-10.1	-0.2	92	27.7	-27.7	1.0	97	29.7	-29.5	3.5			
28	287	12.4	11.9	-3.6	296	12.7	11.4	-5.6	291	9.9	9.3	-3.5	272	3.4	3.4	-0.1	94	11.0	-11.0	0.7	95	25.0	-24.9	2.1	97	29.1	-28.9	3.6			
29	286	13.4	12.9	-3.7	294	13.2	12.0	-5.4	287	10.7	10.2	-3.1	277	3.8	3.8	-0.5	103	9.6	-9.3	2.2	88	23.3	-23.3	-0.8	94	21.8	-21.7	1.5			
30	287	14.7	14.0	-4.4	295	13.1	11.9	-5.5	289	9.7	9.2	-3.2	291	4.0	3.7	-1.4	91	9.8	-9.8	0.2	97	22.5	-22.3	2.9	96	22.5	-22.4	2.4			
31	286	13.9	13.4	-3.8	293	13.9	12.8	-5.5	291	10.5	9.8	-3.8	284	4.9	4.8	-1.2	97	10.5	-10.4	1.3	84	20.8	-20.7	-2.3	97	27.9	-27.7	3.2			

Daily Normals of Upper Air Winds (1971-2000)

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MINICOY

AUGUST

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	282	10.9	10.7	-2.3	295	12.4	11.3	-5.2	285	9.2	8.9	-2.4	282	4.0	3.9	-0.8	96	10.0	-9.9	1.1	92	22.9	-22.9	0.8	96	31.8	-31.6	3.5			
2	291	12.4	11.6	-4.4	297	12.6	11.2	-5.7	291	9.9	9.3	-3.5	273	3.9	3.9	-0.2	99	11.3	-11.2	1.8	88	22.4	-22.4	-0.6	93	27.3	-27.3	1.6			
3	293	12.3	11.3	-4.9	297	12.7	11.3	-5.8	290	9.5	8.9	-3.3	272	2.5	2.5	-0.1	96	10.0	-10.0	1.0	92	24.8	-24.8	1.0	95	25.4	-25.3	2.0			
4	295	12.9	11.7	-5.5	303	12.6	10.6	-6.8	290	9.2	8.7	-3.1	275	4.2	4.2	-0.4	96	10.8	-10.7	1.2	92	29.6	-29.6	0.9	94	30.8	-30.7	2.4			
5	296	11.1	10.0	-4.8	300	12.4	10.7	-6.3	293	9.6	8.9	-3.7	292	3.1	2.9	-1.2	95	12.1	-12.1	1.0	93	22.4	-22.4	1.2	93	31.1	-31.1	1.5			
6	299	10.9	9.5	-5.3	302	11.4	9.7	-6.0	301	9.6	8.2	-4.9	257	3.2	3.1	0.7	105	8.8	-8.5	2.2	88	23.0	-23.0	-0.9	96	25.1	-25.0	2.5			
7	285	9.8	9.4	-2.6	297	11.0	9.8	-4.9	287	9.8	9.4	-2.9	288	3.5	3.3	-1.1	101	10.8	-10.6	2.0	93	24.5	-24.5	1.1	98	25.0	-24.8	3.4			
8	295	11.9	10.7	-5.1	298	12.2	10.8	-5.7	289	10.7	10.1	-3.5	279	5.3	5.2	-0.8	94	10.6	-10.6	0.8	86	23.7	-23.6	-1.6	94	22.3	-22.2	1.5			
9	295	10.3	9.4	-4.3	294	12.1	11.0	-5.0	292	11.6	10.7	-4.4	274	4.0	4.0	-0.3	97	9.6	-9.5	1.2	93	26.7	-26.7	1.5	95	26.7	-26.6	2.3			
10	295	10.3	9.3	-4.4	297	11.9	10.6	-5.3	288	8.6	8.2	-2.6	285	4.8	4.6	-1.2	93	9.1	-9.1	0.4	92	25.4	-25.4	0.9	95	28.5	-28.4	2.6			
11	297	9.0	8.0	-4.1	297	11.4	10.1	-5.2	285	7.7	7.4	-2.0	280	2.8	2.8	-0.5	100	9.6	-9.5	1.6	91	21.5	-21.5	0.5	99	24.5	-24.2	3.7			
12	298	6.7	5.9	-3.2	301	11.2	9.6	-5.7	291	9.3	8.7	-3.3	274	3.2	3.2	-0.2	96	8.7	-8.7	0.9	90	23.7	-23.7	-0.2	92	23.5	-23.5	0.7			
13	293	6.6	6.1	-2.6	294	10.7	9.8	-4.4	287	9.0	8.6	-2.6	273	4.2	4.2	-0.2	102	7.9	-7.7	1.7	91	26.1	-26.1	0.5	99	31.0	-30.6	4.8			
14	319	6.7	4.4	-5.1	299	11.9	10.4	-5.7	290	8.9	8.3	-3.1	290	3.3	3.1	-1.1	106	12.0	-11.5	3.4	94	26.7	-26.6	2.0	98	28.1	-27.8	4.1			
15	301	7.4	6.3	-3.8	300	11.7	10.2	-5.8	296	8.9	8.0	-3.9	287	2.8	2.7	-0.8	106	11.4	-11.0	3.1	99	23.2	-22.9	3.8	97	24.5	-24.3	2.9			
16	295	9.6	8.7	-4.0	301	11.6	9.9	-6.0	294	9.2	8.4	-3.7	291	3.1	2.9	-1.1	97	10.3	-10.2	1.2	89	24.2	-24.2	-0.4	98	23.5	-23.3	3.3			
17	301	9.6	8.2	-4.9	299	12.0	10.5	-5.9	293	9.1	8.4	-3.5	257	3.2	3.1	0.7	110	9.5	-8.9	3.2	94	23.6	-23.5	1.8	103	22.0	-21.5	4.8			
18	302	11.2	9.5	-6.0	297	12.6	11.2	-5.7	293	9.3	8.6	-3.6	281	2.0	2.0	-0.4	107	9.9	-9.5	2.9	97	22.7	-22.5	2.9	101	30.5	-29.9	6.0			
19	291	10.4	9.7	-3.8	298	12.3	10.9	-5.7	294	9.3	8.5	-3.8	283	2.6	2.5	-0.6	98	8.5	-8.4	1.2	90	25.3	-25.3	0.0	104	24.0	-23.3	5.7			
20	305	10.9	8.9	-6.3	300	12.3	10.7	-6.1	285	9.4	9.1	-2.5	279	4.3	4.2	-0.7	100	8.2	-8.1	1.5	96	23.7	-23.6	2.6	99	18.8	-18.6	2.8			
21	296	11.1	10.0	-4.8	300	12.7	11.0	-6.4	290	9.9	9.3	-3.3	295	3.8	3.5	-1.6	89	8.5	-8.5	-0.1	92	22.6	-22.6	0.9	100	19.2	-18.9	3.5			
22	300	12.2	10.6	-6.1	302	12.0	10.2	-6.3	296	10.5	9.4	-4.6	294	3.5	3.2	-1.4	102	8.9	-8.7	1.8	85	25.4	-25.3	-2.1	94	20.4	-20.3	1.5			
23	296	14.0	12.6	-6.1	299	12.9	11.3	-6.3	290	10.0	9.4	-3.4	276	4.5	4.5	-0.5	80	6.8	-6.7	-1.2	89	23.2	-23.2	-0.6	98	21.9	-21.7	3.0			
24	291	11.3	10.6	-4.0	299	11.6	10.1	-5.7	292	9.6	8.9	-3.6	286	4.4	4.2	-1.2	94	9.4	-9.4	0.7	101	25.5	-25.0	5.0	97	24.2	-24.0	3.1			
25	290	12.2	11.5	-4.1	300	11.4	9.9	-5.7	292	8.4	7.8	-3.1	280	4.6	4.5	-0.8	103	10.6	-10.3	2.3	94	28.3	-28.2	2.2	95	31.2	-31.1	2.8			
26	288	9.6	9.1	-3.0	298	10.9	9.6	-5.1	285	7.9	7.6	-2.1	263	3.9	3.9	0.5	95	10.0	-10.0	0.8	97	25.6	-25.4	3.0	92	22.2	-22.2	0.9			
27	287	11.0	10.5	-3.2	299	10.6	9.3	-5.1	281	7.8	7.7	-1.5	291	4.5	4.2	-1.6	96	10.1	-10.1	1.0	95	23.5	-23.4	2.2	99	24.5	-24.2	3.7			
28	291	11.1	10.4	-3.9	297	10.7	9.5	-4.9	287	8.8	8.4	-2.6	282	4.0	3.9	-0.8	102	8.4	-8.2	1.7	88	22.5	-22.5	-0.8	104	20.1	-19.5	4.8			
29	287	10.7	10.2	-3.2	295	10.7	9.7	-4.6	294	8.7	7.9	-3.6	275	3.6	3.6	-0.3	103	8.2	-8.0	1.9	96	24.9	-24.8	2.4	100	25.5	-25.1	4.4			
30	283	10.8	10.5	-2.5	297	10.3	9.2	-4.6	289	8.1	7.7	-2.6	277	3.9	3.9	-0.5	96	8.9	-8.8	1.0	91	24.0	-24.0	0.5	91	22.5	-22.5	0.3			
31	288	11.9	11.3	-3.7	300	9.3	8.0	-4.7	283	6.7	6.5	-1.5	284	2.1	2.0	-0.5	92	9.8	-9.8	0.3	96	24.3	-24.2	2.5	96	21.4	-21.3	2.4			

Daily Normals of Upper Air Winds (1971-2000)

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MINICOY

SEPTEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	293	11.7	10.8	-4.6	301	9.6	8.2	-5.0	293	6.9	6.4	-2.7	274	2.7	2.7	-0.2	93	8.1	-8.1	0.4	96	25.0	-24.9	2.5	89	21.8	-21.8	-0.2			
2	292	11.7	10.9	-4.3	302	8.7	7.4	-4.6	289	6.5	6.1	-2.1	298	2.6	2.3	-1.2	100	10.5	-10.3	1.9	95	26.4	-26.3	2.3	96	23.5	-23.4	2.3			
3	295	10.0	9.1	-4.2	302	8.4	7.1	-4.4	286	7.6	7.3	-2.1	287	3.0	2.9	-0.9	104	13.2	-12.8	3.3	97	26.2	-26.0	3.2	100	20.5	-20.2	3.7			
4	292	9.6	8.9	-3.6	296	8.0	7.2	-3.5	289	6.2	5.9	-2.0	270	1.4	1.4	0.0	99	9.5	-9.4	1.5	95	27.3	-27.2	2.5	95	16.0	-15.9	1.3			
5	295	9.6	8.7	-4.0	301	7.4	6.4	-3.8	285	5.9	5.7	-1.5	300	1.6	1.4	-0.8	96	10.2	-10.2	1.0	94	25.3	-25.2	1.7	93	18.5	-18.5	0.9			
6	294	8.8	8.0	-3.6	303	8.5	7.2	-4.6	283	7.2	7.0	-1.6	319	1.1	0.7	-0.8	110	8.9	-8.4	3.0	97	25.5	-25.3	3.0	92	23.5	-23.5	0.9			
7	303	9.2	7.7	-5.0	301	7.8	6.7	-4.0	291	7.0	6.5	-2.5	225	0.8	0.6	0.6	97	8.2	-8.1	1.0	93	21.3	-21.3	1.1	99	19.9	-19.7	3.1			
8	304	10.1	8.4	-5.6	304	8.3	6.9	-4.7	294	7.7	7.1	-3.1	299	2.1	1.8	-1.0	102	8.0	-7.8	1.6	95	22.2	-22.1	1.8	94	21.0	-21.0	1.4			
9	310	8.0	6.1	-5.1	304	8.3	6.9	-4.6	292	7.9	7.3	-2.9	294	3.7	3.4	-1.5	101	9.2	-9.0	1.8	96	23.5	-23.4	2.4	94	19.7	-19.7	1.3			
10	307	7.5	6.0	-4.5	306	8.8	7.1	-5.2	294	7.0	6.4	-2.8	331	1.8	0.9	-1.6	108	9.6	-9.1	2.9	100	22.6	-22.2	4.1	90	16.2	-16.2	0.0			
11	313	7.0	5.1	-4.8	305	8.0	6.6	-4.6	297	6.2	5.5	-2.8	348	1.9	0.4	-1.9	107	9.5	-9.1	2.8	100	20.8	-20.5	3.7	98	16.5	-16.4	2.2			
12	316	6.2	4.3	-4.4	307	8.2	6.6	-4.9	288	5.9	5.6	-1.8	335	1.7	0.7	-1.5	103	8.2	-8.0	1.8	102	19.4	-19.0	4.0	98	20.3	-20.1	3.0			
13	301	5.4	4.6	-2.8	305	7.8	6.4	-4.4	298	5.1	4.5	-2.4	351	1.8	0.3	-1.8	99	9.1	-9.0	1.5	101	19.7	-19.3	3.7	102	18.8	-18.4	3.9			
14	305	6.4	5.2	-3.7	302	7.1	6.0	-3.8	292	4.8	4.4	-1.8	76	0.8	-0.8	-0.2	104	8.2	-8.0	2.0	102	18.3	-17.9	3.7	107	17.2	-16.5	4.9			
15	302	6.8	5.8	-3.6	307	6.4	5.1	-3.9	308	4.8	3.8	-3.0	36	1.7	-1.0	-1.4	98	8.6	-8.5	1.2	101	19.6	-19.3	3.6	107	16.7	-16.0	4.8			
16	307	6.8	5.4	-4.1	304	7.8	6.5	-4.4	304	4.8	4.0	-2.7	31	1.2	-0.6	-1.0	91	8.2	-8.2	0.2	100	17.9	-17.6	3.0	101	18.8	-18.5	3.6			
17	306	7.7	6.3	-4.5	303	7.9	6.6	-4.3	297	5.8	5.2	-2.6	339	1.4	0.5	-1.3	101	8.1	-8.0	1.5	102	19.0	-18.6	4.0	105	17.6	-17.0	4.7			
18	314	8.0	5.7	-5.6	302	7.7	6.5	-4.1	287	6.8	6.5	-2.0	68	0.5	-0.5	-0.2	98	7.4	-7.3	1.0	92	18.6	-18.6	0.5	99	22.0	-21.8	3.3			
19	307	7.6	6.0	-4.6	300	8.0	6.9	-4.0	291	7.0	6.5	-2.5	318	1.5	1.0	-1.1	101	8.0	-7.9	1.5	99	15.9	-15.7	2.6	103	15.9	-15.5	3.5			
20	301	8.3	7.1	-4.3	294	8.5	7.7	-3.5	286	6.6	6.3	-1.8	328	1.3	0.7	-1.1	112	10.0	-9.2	3.8	100	16.3	-16.0	2.9	97	22.9	-22.7	2.8			
21	309	8.5	6.6	-5.3	292	8.7	8.1	-3.2	286	7.9	7.6	-2.2	273	1.7	1.7	-0.1	102	10.0	-9.8	2.1	94	17.2	-17.2	1.3	101	20.1	-19.7	3.9			
22	309	8.5	6.6	-5.3	295	9.3	8.4	-4.0	295	8.0	7.2	-3.4	309	1.9	1.5	-1.2	106	8.9	-8.5	2.5	99	18.3	-18.1	2.9	102	16.9	-16.5	3.6			
23	307	7.8	6.2	-4.7	297	8.9	8.0	-4.0	289	7.0	6.6	-2.3	315	0.8	0.6	-0.6	87	7.8	-7.8	-0.4	99	18.6	-18.4	2.9	104	15.4	-14.9	3.8			
24	309	6.3	4.9	-3.9	297	8.2	7.3	-3.8	294	7.0	6.4	-2.9	333	0.9	0.4	-0.8	103	8.2	-8.0	1.9	96	20.1	-20.0	2.1	99	16.4	-16.2	2.5			
25	300	5.9	5.1	-3.0	299	8.4	7.3	-4.1	292	6.8	6.3	-2.6	354	1.0	0.1	-1.0	111	7.9	-7.4	2.8	102	17.0	-16.6	3.6	97	16.4	-16.3	2.0			
26	306	4.6	3.7	-2.7	295	6.8	6.1	-2.9	284	6.9	6.7	-1.7	240	1.4	1.2	0.7	103	8.3	-8.1	1.9	96	16.7	-16.6	1.8	91	14.3	-14.3	0.2			
27	294	6.7	6.1	-2.7	295	6.8	6.2	-2.9	277	6.3	6.2	-0.8	153	0.4	-0.2	0.4	103	9.9	-9.6	2.3	94	18.3	-18.3	1.3	102	17.6	-17.2	3.5			
28	286	7.7	7.4	-2.1	293	7.5	6.9	-2.9	290	6.8	6.4	-2.3	308	2.4	1.9	-1.5	100	9.2	-9.1	1.6	88	17.7	-17.7	-0.5	102	16.3	-15.9	3.4			
29	292	7.2	6.7	-2.7	302	6.5	5.5	-3.5	295	6.3	5.7	-2.7	284	1.6	1.6	-0.4	101	6.3	-6.2	1.2	94	19.7	-19.6	1.5	99	13.9	-13.7	2.2			
30	292	5.7	5.3	-2.1	295	4.7	4.3	-2.0	295	4.7	4.2	-2.0	292	2.2	2.0	-0.8	94	5.6	-5.6	0.4	97	16.5	-16.4	2.0	99	14.3	-14.1	2.2			

Daily Normals of Upper Air Winds (1971-2000)

MINICOY

OCTOBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	274	5.4	5.4	-0.4	279	5.6	5.5	-0.9	282	4.7	4.6	-1.0	258	1.4	1.4	0.3	99	5.7	-5.6	0.9	96	17.5	-17.4	1.8	104	11.9	-11.5	2.9			
2	288	5.2	4.9	-1.6	286	6.1	5.9	-1.7	274	4.5	4.5	-0.3	254	1.8	1.7	0.5	103	6.9	-6.7	1.5	99	15.3	-15.1	2.4	102	11.9	-11.6	2.5			
3	277	4.8	4.8	-0.6	287	5.9	5.6	-1.7	277	4.7	4.7	-0.6	274	1.6	1.6	-0.1	105	6.5	-6.3	1.7	90	17.7	-17.7	-0.1	90	11.5	-11.5	-0.1			
4	291	5.8	5.4	-2.1	290	7.3	6.9	-2.5	293	6.4	5.9	-2.5	292	2.9	2.7	-1.1	106	8.1	-7.8	2.3	101	17.6	-17.3	3.3	92	10.4	-10.4	0.3			
5	287	8.9	8.5	-2.6	299	6.8	6.0	-3.3	297	5.3	4.7	-2.4	288	1.9	1.8	-0.6	106	7.5	-7.2	2.1	95	15.2	-15.1	1.4	106	12.2	-11.7	3.4			
6	281	8.1	7.9	-1.6	288	5.9	5.6	-1.8	298	4.3	3.8	-2.0	288	1.6	1.5	-0.5	106	5.4	-5.2	1.5	98	14.2	-14.1	1.9	93	10.1	-10.1	0.5			
7	279	9.3	9.2	-1.5	288	6.1	5.8	-1.9	288	5.6	5.3	-1.7	349	1.0	0.2	-1.0	99	6.9	-6.8	1.1	96	16.2	-16.1	1.7	97	11.9	-11.8	1.4			
8	267	10.7	10.7	0.6	282	6.6	6.5	-1.4	294	5.8	5.3	-2.4	17	1.0	-0.3	-1.0	106	6.1	-5.9	1.7	98	13.7	-13.6	1.8	101	15.0	-14.7	2.9			
9	272	5.1	5.1	-0.2	299	4.7	4.1	-2.3	300	3.8	3.3	-1.9	90	1.1	-1.1	0.0	102	7.3	-7.1	1.5	100	15.0	-14.8	2.5	95	14.4	-14.4	1.2			
10	271	7.4	7.4	-0.1	281	4.2	4.1	-0.8	300	2.4	2.1	-1.2	79	1.0	-1.0	-0.2	95	7.0	-7.0	0.6	97	12.2	-12.1	1.4	85	10.0	-10.0	-0.8			
11	267	5.7	5.7	0.3	278	3.5	3.5	-0.5	267	1.7	1.7	0.1	48	1.2	-0.9	-0.8	101	6.6	-6.5	1.3	95	10.8	-10.8	1.0	108	13.2	-12.5	4.1			
12	271	5.8	5.8	-0.1	287	3.1	3.0	-0.9	278	1.5	1.5	-0.2	70	1.2	-1.1	-0.4	104	6.1	-5.9	1.5	97	15.3	-15.2	1.8	116	13.1	-11.8	5.8			
13	266	3.9	3.9	0.3	288	2.2	2.1	-0.7	287	2.4	2.3	-0.7	45	0.1	-0.1	-0.1	106	5.9	-5.7	1.6	96	13.4	-13.3	1.4	89	10.2	-10.2	-0.1			
14	270	5.0	5.0	0.0	298	3.2	2.8	-1.5	285	2.8	2.7	-0.7	27	0.9	-0.4	-0.8	117	4.2	-3.8	1.9	103	13.6	-13.3	3.0	114	13.6	-12.4	5.5			
15	275	6.0	6.0	-0.5	302	4.5	3.8	-2.4	294	3.6	3.3	-1.5	7	0.8	-0.1	-0.8	113	4.8	-4.4	1.9	107	13.5	-12.9	4.0	95	11.1	-11.1	1.0			
16	280	6.6	6.5	-1.2	284	4.6	4.5	-1.1	295	3.8	3.5	-1.6	329	0.6	0.3	-0.5	114	3.9	-3.6	1.6	102	11.3	-11.0	2.4	89	12.7	-12.7	-0.3			
17	286	5.4	5.2	-1.5	301	5.1	4.4	-2.6	293	3.4	3.1	-1.3	347	1.3	0.3	-1.3	106	5.1	-4.9	1.4	103	15.4	-15.0	3.4	92	10.3	-10.3	0.4			
18	294	7.6	6.9	-3.1	291	5.1	4.8	-1.8	285	3.8	3.7	-1.0	99	0.6	-0.6	0.1	108	6.6	-6.3	2.0	98	14.4	-14.2	2.1	95	11.8	-11.8	1.0			
19	299	6.0	5.3	-2.9	306	4.1	3.3	-2.4	288	3.5	3.3	-1.1	79	2.1	-2.1	-0.4	103	6.6	-6.4	1.5	100	12.9	-12.7	2.2	101	14.2	-14.0	2.6			
20	306	4.8	3.9	-2.8	313	2.5	1.8	-1.7	290	2.0	1.9	-0.7	131	1.8	-1.4	1.2	121	5.1	-4.4	2.6	95	14.8	-14.7	1.4	110	9.4	-8.8	3.2			
21	282	3.5	3.4	-0.7	299	1.8	1.6	-0.9	283	1.3	1.3	-0.3	106	2.2	-2.1	0.6	100	6.1	-6.0	1.1	101	12.1	-11.9	2.4	98	15.2	-15.0	2.2			
22	273	3.8	3.8	-0.2	292	1.6	1.5	-0.6	274	1.4	1.4	-0.1	124	1.1	-0.9	0.6	104	5.3	-5.1	1.3	104	13.3	-12.9	3.2	109	10.0	-9.5	3.2			
23	278	3.5	3.5	-0.5	313	1.9	1.4	-1.3	315	2.1	1.5	-1.5	71	2.4	-2.3	-0.8	97	6.9	-6.9	0.8	102	13.0	-12.7	2.6	112	9.3	-8.6	3.5			
24	291	2.5	2.3	-0.9	321	1.4	0.9	-1.1	305	1.2	1.0	-0.7	118	1.5	-1.3	0.7	106	6.8	-6.5	1.9	100	12.1	-11.9	2.2	92	8.2	-8.2	0.3			
25	302	0.9	0.8	-0.5	321	1.3	0.8	-1.0	311	1.1	0.8	-0.7	85	3.3	-3.3	-0.3	94	6.3	-6.3	0.4	106	12.9	-12.4	3.5	106	7.9	-7.6	2.2			
26	332	3.2	1.5	-2.8	290	1.2	1.1	-0.4	302	1.3	1.1	-0.7	86	1.4	-1.4	-0.1	105	4.6	-4.4	1.2	113	10.1	-9.3	4.0	110	10.2	-9.6	3.4			
27	318	3.1	2.1	-2.3	293	1.3	1.2	-0.5	31	0.6	-0.3	-0.5	103	2.7	-2.6	0.6	110	4.0	-3.8	1.4	116	10.6	-9.5	4.6	83	6.5	-6.5	-0.8			
28	300	3.4	3.0	-1.7	279	2.0	2.0	-0.3	266	1.4	1.4	0.1	76	0.4	-0.4	-0.1	100	5.4	-5.3	0.9	100	9.8	-9.7	1.7	119	7.9	-6.9	3.9			
29	315	1.6	1.1	-1.1	297	1.3	1.2	-0.6	279	1.2	1.2	-0.2	76	1.2	-1.2	-0.3	102	4.8	-4.7	1.0	113	8.7	-8.0	3.4	105	7.9	-7.6	2.0			
30	325	3.5	2.0	-2.9	340	1.2	0.4	-1.1	325	2.1	1.2	-1.7	75	2.4	-2.3	-0.6	112	4.6	-4.3	1.7	128	6.7	-5.3	4.1	99	8.0	-7.9	1.2			
31	305	2.4	2.0	-1.4	326	1.1	0.6	-0.9	310	1.6	1.2	-1.0	90	2.4	-2.4	0.0	109	4.3	-4.1	1.4	114	6.6	-6.0	2.7	104	9.8	-9.5	2.3			

Daily Normals of Upper Air Winds (1971-2000)

MINICOY

NOVEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	349	2.0	0.4	-2.0	342	0.6	0.2	-0.6	315	1.4	1.0	-1.0	77	2.6	-2.5	-0.6	95	4.6	-4.6	0.4	114	6.8	-6.2	2.8	125	4.4	-3.6	2.5			
2	319	1.8	1.2	-1.4	317	1.6	1.1	-1.2	285	1.6	1.5	-0.4	51	1.4	-1.1	-0.9	106	4.6	-4.4	1.3	112	10.1	-9.4	3.8	108	6.8	-6.5	2.1			
3	303	1.7	1.4	-0.9	313	2.1	1.5	-1.4	311	3.0	2.3	-2.0	66	1.7	-1.6	-0.7	104	3.3	-3.2	0.8	120	8.3	-7.2	4.2	96	6.5	-6.5	0.7			
4	7	1.6	-0.2	-1.6	13	1.7	-0.4	-1.7	22	0.5	-0.2	-0.5	50	2.3	-1.8	-1.5	107	3.4	-3.3	1.0	114	9.5	-8.7	3.8	105	11.7	-11.3	3.0			
5	347	1.8	0.4	-1.8	22	1.6	-0.6	-1.5	24	1.0	-0.4	-0.9	70	3.7	-3.5	-1.3	94	5.6	-5.6	0.4	113	9.5	-8.8	3.7	101	7.0	-6.9	1.3			
6	346	3.8	0.9	-3.7	311	2.1	1.6	-1.4	312	1.2	0.9	-0.8	66	1.7	-1.6	-0.7	112	4.5	-4.2	1.7	111	9.9	-9.2	3.6	107	6.3	-6.0	1.8			
7	4	2.8	-0.2	-2.8	332	1.9	0.9	-1.7	323	2.5	1.5	-2.0	51	1.9	-1.5	-1.2	101	6.1	-6.0	1.2	113	10.2	-9.4	3.9	113	5.3	-4.9	2.1			
8	327	3.5	1.9	-2.9	313	1.6	1.2	-1.1	297	1.8	1.6	-0.8	47	1.9	-1.4	-1.3	98	4.4	-4.4	0.6	113	13.0	-12.0	5.0	98	5.3	-5.3	0.7			
9	350	2.7	0.5	-2.7	337	1.5	0.6	-1.4	330	1.6	0.8	-1.4	99	3.2	-3.2	0.5	99	6.0	-5.9	0.9	116	6.7	-6.0	2.9	95	10.7	-10.7	1.0			
10	315	1.3	0.9	-0.9	357	1.7	0.1	-1.7	27	1.6	-0.7	-1.4	105	2.3	-2.2	0.6	106	5.6	-5.4	1.5	119	7.1	-6.2	3.4	112	7.0	-6.5	2.6			
11	285	1.1	1.1	-0.3	13	1.3	-0.3	-1.3	54	1.4	-1.1	-0.8	83	3.1	-3.1	-0.4	113	6.6	-6.1	2.6	120	7.7	-6.7	3.8	93	6.2	-6.2	0.3			
12	39	0.6	-0.4	-0.5	54	0.9	-0.7	-0.5	124	0.7	-0.6	0.4	79	3.8	-3.7	-0.7	104	5.8	-5.6	1.4	117	8.5	-7.5	3.9	94	6.2	-6.2	0.4			
13	98	2.1	-2.1	0.3	68	0.5	-0.5	-0.2	153	1.3	-0.6	1.2	117	1.6	-1.4	0.7	108	5.1	-4.8	1.6	121	9.6	-8.2	5.0	106	8.1	-7.8	2.2			
14	358	2.5	0.1	-2.5	68	1.1	-1.0	-0.4	360	0.1	0.0	-0.1	107	3.4	-3.2	1.0	112	7.4	-6.8	2.8	99	9.1	-9.0	1.5	97	9.3	-9.2	1.1			
15	344	2.5	0.7	-2.4	9	1.8	-0.3	-1.8	4	1.3	-0.1	-1.3	105	2.8	-2.7	0.7	109	4.9	-4.6	1.6	120	12.0	-10.4	6.0	118	4.5	-4.0	2.1			
16	346	3.2	0.8	-3.1	13	1.3	-0.3	-1.3	360	0.4	0.0	-0.4	95	2.2	-2.2	0.2	115	5.3	-4.8	2.2	126	12.8	-10.4	7.5	104	3.4	-3.3	0.8			
17	305	2.1	1.7	-1.2	353	0.8	0.1	-0.8	31	0.6	-0.3	-0.5	103	2.6	-2.5	0.6	134	4.6	-3.3	3.2	132	8.7	-6.5	5.8	121	7.5	-6.4	3.9			
18	342	2.9	0.9	-2.8	34	1.4	-0.8	-1.2	34	1.4	-0.8	-1.2	93	3.3	-3.3	0.2	115	3.1	-2.8	1.3	143	8.1	-4.9	6.4	105	5.1	-4.9	1.3			
19	13	3.5	-0.8	-3.4	328	0.9	0.5	-0.8	302	0.9	0.8	-0.5	82	2.7	-2.7	-0.4	127	2.1	-1.7	1.3	153	7.5	-3.4	6.7	113	6.1	-5.6	2.4			
20	5	3.3	-0.3	-3.3	14	1.2	-0.3	-1.2	288	1.6	1.5	-0.5	39	2.2	-1.4	-1.7	113	3.8	-3.5	1.5	150	7.3	-3.6	6.3	100	5.5	-5.4	1.0			
21	18	2.9	-0.9	-2.8	28	1.9	-0.9	-1.7	323	2.0	1.2	-1.6	65	3.3	-3.0	-1.4	114	3.4	-3.1	1.4	174	6.0	-0.6	6.0	76	7.8	-7.6	-1.9			
22	32	3.1	-1.6	-2.6	47	2.2	-1.6	-1.5	360	2.5	0.0	-2.5	71	2.1	-2.0	-0.7	115	4.3	-3.9	1.8	152	7.6	-3.5	6.7	99	6.6	-6.5	1.0			
23	39	0.6	-0.4	-0.5	45	1.0	-0.7	-0.7	27	0.4	-0.2	-0.4	79	3.6	-3.5	-0.7	134	3.3	-2.4	2.3	181	6.4	0.1	6.4	99	5.5	-5.4	0.9			
24	37	1.0	-0.6	-0.8	56	1.1	-0.9	-0.6	322	1.1	0.7	-0.9	53	4.0	-3.2	-2.4	130	5.1	-3.9	3.3	149	6.6	-3.4	5.6	118	8.0	-7.1	3.7			
25	32	2.5	-1.3	-2.1	28	1.7	-0.8	-1.5	352	1.5	0.2	-1.5	94	4.0	-4.0	0.3	99	3.8	-3.8	0.6	119	7.1	-6.2	3.4	92	3.8	-3.8	0.1			
26	28	4.5	-2.1	-4.0	13	2.2	-0.5	-2.1	330	0.8	0.4	-0.7	86	4.1	-4.1	-0.3	113	4.6	-4.2	1.8	120	6.9	-6.0	3.4	106	4.4	-4.2	1.2			
27	36	4.2	-2.5	-3.4	37	2.0	-1.2	-1.6	41	0.9	-0.6	-0.7	71	5.2	-4.9	-1.7	104	3.7	-3.6	0.9	138	9.3	-6.2	6.9	117	7.2	-6.4	3.3			
28	18	2.9	-0.9	-2.8	36	2.2	-1.3	-1.8	60	1.4	-1.2	-0.7	74	6.0	-5.8	-1.7	95	3.2	-3.2	0.3	154	9.3	-4.1	8.3	110	6.3	-5.9	2.2			
29	355	4.4	0.4	-4.4	65	2.6	-2.4	-1.1	78	2.4	-2.3	-0.5	73	5.7	-5.4	-1.7	117	3.4	-3.0	1.5	169	9.1	-1.7	8.9	116	9.0	-8.1	3.9			
30	357	3.4	0.2	-3.4	49	3.0	-2.3	-2.0	42	2.7	-1.8	-2.0	84	7.0	-7.0	-0.7	106	3.7	-3.6	1.0	141	6.5	-4.1	5.1	107	8.2	-7.8	2.4			

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MINICOY

DECEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	27	3.7	-1.7	-3.3	65	3.1	-2.8	-1.3	55	3.5	-2.9	-2.0	94	8.0	-8.0	0.5	111	6.0	-5.6	2.1	142	6.1	-3.8	4.8	126	8.8	-7.1	5.2
2	36	1.7	-1.0	-1.4	51	2.8	-2.2	-1.8	80	2.2	-2.2	-0.4	99	7.8	-7.7	1.2	126	5.3	-4.3	3.1	156	6.2	-2.5	5.7	109	6.7	-6.3	2.2
3	54	3.7	-3.0	-2.2	79	2.5	-2.5	-0.5	88	2.5	-2.5	-0.1	88	7.5	-7.5	-0.3	137	5.7	-3.9	4.2	148	8.9	-4.7	7.6	119	5.5	-4.8	2.7
4	74	3.2	-3.1	-0.9	67	3.3	-3.0	-1.3	104	3.8	-3.7	0.9	87	6.6	-6.6	-0.3	136	5.2	-3.6	3.7	145	7.3	-4.2	6.0	111	6.0	-5.6	2.2
5	43	2.5	-1.7	-1.8	69	3.1	-2.9	-1.1	84	2.7	-2.7	-0.3	86	5.9	-5.9	-0.4	137	5.0	-3.4	3.7	149	8.1	-4.2	6.9	106	6.1	-5.9	1.7
6	40	3.9	-2.5	-3.0	57	3.0	-2.5	-1.6	68	3.5	-3.3	-1.3	75	4.8	-4.6	-1.2	121	3.9	-3.3	2.0	140	7.2	-4.6	5.5	84	4.8	-4.8	-0.5
7	14	3.4	-0.8	-3.3	34	2.2	-1.2	-1.8	85	2.4	-2.4	-0.2	79	4.7	-4.6	-0.9	152	3.0	-1.4	2.6	165	8.6	-2.2	8.3	92	3.1	-3.1	0.1
8	360	2.3	0.0	-2.3	24	1.7	-0.7	-1.6	57	1.7	-1.4	-0.9	89	4.0	-4.0	-0.1	155	3.3	-1.4	3.0	160	7.2	-2.5	6.8	75	3.4	-3.3	-0.9
9	25	3.1	-1.3	-2.8	43	1.9	-1.3	-1.4	48	1.5	-1.1	-1.0	80	3.4	-3.3	-0.6	104	4.1	-4.0	1.0	173	5.0	-0.6	5.0	145	1.2	-0.7	1.0
10	26	3.0	-1.3	-2.7	40	1.6	-1.0	-1.2	34	1.4	-0.8	-1.2	68	4.0	-3.7	-1.5	144	3.9	-2.3	3.2	166	6.8	-1.6	6.6	116	3.7	-3.3	1.6
11	26	2.5	-1.1	-2.3	85	2.4	-2.4	-0.2	83	3.4	-3.4	-0.4	82	5.7	-5.6	-0.8	136	6.0	-4.2	4.3	169	6.4	-1.2	6.3	125	4.7	-3.8	2.7
12	68	3.8	-3.5	-1.4	81	3.2	-3.2	-0.5	97	4.1	-4.1	0.5	86	5.5	-5.5	-0.4	157	5.0	-2.0	4.6	179	4.8	-0.1	4.8	159	2.5	-0.9	2.3
13	54	4.6	-3.7	-2.7	80	3.5	-3.4	-0.6	87	4.1	-4.1	-0.2	87	6.8	-6.8	-0.3	23	0.8	-0.3	-0.7	172	4.9	-0.7	4.8	149	5.1	-2.6	4.4
14	49	4.1	-3.1	-2.7	77	3.1	-3.0	-0.7	85	4.6	-4.6	-0.4	84	6.5	-6.5	-0.7	111	2.5	-2.3	0.9	196	2.6	0.7	2.5	229	0.9	0.7	0.6
15	49	4.6	-3.5	-3.0	69	3.4	-3.2	-1.2	78	3.8	-3.7	-0.8	87	4.1	-4.1	-0.2	243	2.0	1.8	0.9	198	6.0	1.8	5.7	222	2.5	1.7	1.9
16	66	3.2	-2.9	-1.3	82	3.0	-3.0	-0.4	92	3.6	-3.6	0.1	92	4.9	-4.9	0.2	112	0.5	-0.5	0.2	217	6.1	3.7	4.9	118	2.6	-2.3	1.2
17	59	2.9	-2.5	-1.5	83	4.2	-4.2	-0.5	77	3.7	-3.6	-0.8	95	5.6	-5.6	0.5	122	1.3	-1.1	0.7	210	5.9	2.9	5.1	48	1.2	-0.9	-0.8
18	75	2.7	-2.6	-0.7	78	4.2	-4.1	-0.9	84	4.1	-4.1	-0.4	77	4.7	-4.6	-1.1	99	1.8	-1.8	0.3	149	6.6	-3.4	5.7	41	0.9	-0.6	-0.7
19	100	2.7	-2.7	0.5	96	3.8	-3.8	0.4	93	3.4	-3.4	0.2	97	5.6	-5.6	0.7	149	3.1	-1.6	2.7	175	5.8	-0.5	5.8	138	3.8	-2.5	2.8
20	69	3.6	-3.4	-1.3	83	5.1	-5.1	-0.6	78	3.3	-3.2	-0.7	98	4.9	-4.8	0.7	153	2.0	-0.9	1.8	226	4.2	3.0	2.9	257	4.5	4.4	1.0
21	69	3.3	-3.1	-1.2	77	3.7	-3.6	-0.8	92	3.7	-3.7	0.1	87	6.6	-6.6	-0.4	142	2.3	-1.4	1.8	213	4.2	2.3	3.5	324	3.6	2.1	-2.9
22	71	3.4	-3.2	-1.1	70	3.5	-3.3	-1.2	69	3.4	-3.2	-1.2	84	4.8	-4.8	-0.5	189	2.4	0.4	2.4	195	5.2	1.3	5.0	229	3.0	2.3	2.0
23	69	4.2	-3.9	-1.5	71	3.7	-3.5	-1.2	71	3.9	-3.7	-1.3	81	5.2	-5.1	-0.8	157	4.8	-1.9	4.4	198	5.1	1.6	4.8	247	3.6	3.3	1.4
24	58	2.8	-2.4	-1.5	70	2.9	-2.7	-1.0	88	3.6	-3.6	-0.1	74	4.5	-4.3	-1.2	154	3.9	-1.7	3.5	164	8.1	-2.2	7.8	360	1.1	0.0	-1.1
25	68	2.2	-2.0	-0.8	77	3.1	-3.0	-0.7	87	3.5	-3.5	-0.2	72	3.9	-3.7	-1.2	170	2.3	-0.4	2.3	175	6.5	-0.6	6.5	126	2.7	-2.2	1.6
26	40	3.4	-2.2	-2.6	83	3.5	-3.5	-0.4	96	3.1	-3.1	0.3	83	4.0	-4.0	-0.5	157	3.4	-1.3	3.1	188	6.9	1.0	6.8	148	1.3	-0.7	1.1
27	66	3.0	-2.7	-1.2	70	3.5	-3.3	-1.2	69	3.1	-2.9	-1.1	81	5.5	-5.4	-0.9	126	2.6	-2.1	1.5	179	4.2	-0.1	4.2	142	3.4	-2.1	2.7
28	56	3.2	-2.7	-1.8	63	3.6	-3.2	-1.6	85	3.3	-3.3	-0.3	82	4.2	-4.2	-0.6	124	4.1	-3.4	2.3	186	5.7	0.6	5.7	119	2.9	-2.5	1.4
29	68	3.2	-3.0	-1.2	76	3.2	-3.1	-0.8	89	4.1	-4.1	-0.1	96	6.3	-6.3	0.7	121	2.7	-2.3	1.4	183	5.5	0.3	5.5	129	4.8	-3.7	3.0
30	66	3.7	-3.4	-1.5	72	3.5	-3.3	-1.1	80	3.6	-3.5	-0.6	92	6.8	-6.8	0.2	158	5.1	-1.9	4.7	172	8.4	-1.1	8.3	93	6.4	-6.4	0.3
31	67	4.6	-4.2	-1.8	83	3.2	-3.2	-0.4	86	4.2	-4.2	-0.3	89	7.3	-7.3	-0.1	169	5.1	-1.0	5.0	198	7.3	2.3	6.9	85	7.4	-7.4	-0.6

Daily Normals of Upper Air Winds (1971-2000)

253

MOHANBARI

JANUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	59	0.6	-0.5	-0.3	180	0.9	0.0	0.9	192	3.9	0.8	3.8	260	15.3	15.1	2.7	269	37.6	37.6	0.9	264	60.1	59.8	6.1	276	23.8	23.7	-2.6			
2	50	1.7	-1.3	-1.1	90	1.3	-1.3	0.0	214	1.8	1.0	1.5	272	11.6	11.6	-0.4	280	32.6	32.1	-5.5	271	45.9	45.9	-0.6	267	26.9	26.9	1.4			
3	55	1.2	-1.0	-0.7	159	0.9	-0.3	0.8	160	1.5	-0.5	1.4	276	16.9	16.8	-1.7	270	40.6	40.6	0.2	260	54.0	53.2	9.5	268	33.7	33.7	0.9			
4	45	1.4	-1.0	-1.0	97	0.8	-0.8	0.1	216	3.1	1.8	2.5	274	15.5	15.5	-1.2	271	39.6	39.6	-1.0	257	45.0	43.9	10.1	276	21.0	20.9	-2.2			
5	47	2.1	-1.5	-1.4	110	1.2	-1.1	0.4	217	3.1	1.9	2.5	275	17.2	17.1	-1.5	271	38.3	38.3	-0.9	276	54.5	54.2	-5.9	268	29.3	29.3	1.2			
6	27	0.4	-0.2	-0.4	76	0.4	-0.4	-0.1	200	2.7	0.9	2.5	262	19.2	19.0	2.6	283	40.1	39.0	-9.2	278	49.9	49.4	-7.2	241	31.0	27.1	15.0			
7	82	1.5	-1.5	-0.2	113	1.5	-1.4	0.6	199	3.4	1.1	3.2	264	14.3	14.2	1.4	272	38.2	38.2	-1.1	254	61.5	59.2	16.5	271	25.9	25.9	-0.5			
8	36	0.9	-0.5	-0.7	129	0.6	-0.5	0.4	204	3.9	1.6	3.6	264	16.6	16.5	1.8	262	40.9	40.5	5.9	255	49.4	47.8	12.6	228	14.0	10.4	9.4			
9	84	1.9	-1.9	-0.2	90	0.4	-0.4	0.0	219	2.2	1.4	1.7	268	17.8	17.8	0.5	270	35.7	35.7	-0.2	270	49.4	49.4	-0.3	282	25.1	24.5	-5.4			
10	360	0.7	0.0	-0.7	180	1.0	0.0	1.0	229	4.5	3.4	3.0	261	24.4	24.1	3.8	265	56.5	56.3	5.1	261	61.7	60.9	9.7	261	37.7	37.2	6.1			
11	64	2.5	-2.3	-1.1	167	0.9	-0.2	0.9	218	5.4	3.3	4.3	265	23.0	22.9	2.1	271	50.0	50.0	-1.3	255	58.0	56.1	14.7	277	32.0	31.8	-3.9			
12	87	1.8	-1.8	-0.1	207	0.7	0.3	0.6	219	7.7	4.8	6.0	265	26.6	26.5	2.5	256	43.2	42.0	10.1	236	57.1	47.1	32.3	263	36.0	35.7	4.4			
13	48	2.7	-2.0	-1.8	236	0.4	0.3	0.2	213	3.8	2.1	3.2	258	18.9	18.5	3.9	263	48.9	48.6	5.6	248	53.4	49.4	20.3	259	29.0	28.5	5.5			
14	76	0.8	-0.8	-0.2	167	0.9	-0.2	0.9	209	3.9	1.9	3.4	270	19.4	19.4	0.0	274	33.8	33.7	-2.5	269	40.1	40.1	0.7	269	29.5	29.5	0.7			
15	86	1.6	-1.6	-0.1	114	1.0	-0.9	0.4	225	3.1	2.2	2.2	266	17.5	17.5	1.3	276	47.7	47.4	-5.4	268	49.4	49.4	1.3	279	25.4	25.1	-3.9			
16	77	2.6	-2.5	-0.6	163	1.4	-0.4	1.3	216	3.6	2.1	2.9	264	14.7	14.6	1.5	264	44.4	44.1	4.9	262	46.6	46.2	6.2	285	32.0	30.9	-8.4			
17	58	1.9	-1.6	-1.0	276	1.0	1.0	-0.1	254	5.0	4.8	1.4	265	18.0	17.9	1.5	269	49.1	49.1	0.7	268	53.2	53.2	1.8	269	25.1	25.1	0.3			
18	49	2.3	-1.7	-1.5	56	0.4	-0.3	-0.2	216	4.1	2.4	3.3	258	20.0	19.6	4.0	277	54.1	53.7	-6.5	269	55.5	55.5	0.9	271	28.0	28.0	-0.5			
19	75	1.1	-1.1	-0.3	158	1.1	-0.4	1.0	212	6.2	3.3	5.2	256	18.3	17.8	4.3	269	35.7	35.7	0.7	266	51.6	51.5	3.6	250	26.9	25.4	9.0			
20	87	2.0	-2.0	-0.1	164	1.5	-0.4	1.4	221	6.6	4.3	5.0	268	10.2	10.2	0.4	268	21.7	21.7	0.8	254	44.0	42.3	12.1	256	41.0	39.8	9.9			
21	77	2.2	-2.1	-0.5	184	1.5	0.1	1.5	219	4.0	2.5	3.1	263	21.6	21.4	2.7	268	46.2	46.2	1.7	263	55.9	55.4	7.2	256	34.6	33.5	8.5			
22	74	1.5	-1.4	-0.4	56	0.4	-0.3	-0.2	203	4.7	1.8	4.3	260	18.1	17.8	3.0	264	47.0	46.7	5.1	256	51.3	49.8	12.4	257	34.6	33.8	7.5			
23	149	0.6	-0.3	0.5	180	1.5	0.0	1.5	221	3.7	2.4	2.8	268	24.2	24.2	0.7	283	36.9	35.9	-8.5	268	57.9	57.9	1.6	260	22.0	21.7	3.8			
24	139	0.9	-0.6	0.7	270	0.3	0.3	0.0	211	2.9	1.5	2.5	267	16.4	16.4	0.8	268	38.5	38.5	1.3	257	48.8	47.5	11.2	228	17.5	13.1	11.6			
25	70	1.5	-1.4	-0.5	85	1.1	-1.1	-0.1	208	3.4	1.6	3.0	270	15.2	15.2	0.0	286	35.6	34.3	-9.6	267	33.5	33.5	1.8	255	22.8	22.0	5.9			
26	80	1.7	-1.7	-0.3	130	0.8	-0.6	0.5	222	4.6	3.1	3.4	265	15.7	15.6	1.4	277	37.8	37.5	-4.4	254	42.2	40.5	11.7	265	22.3	22.2	1.9			
27	88	2.3	-2.3	-0.1	169	0.5	-0.1	0.5	218	6.1	3.8	4.8	258	19.5	19.1	4.0	277	36.2	36.0	-4.2	270	35.0	35.0	0.1	255	29.0	28.0	7.5			
28	315	0.3	0.2	-0.2	176	1.6	-0.1	1.6	216	4.9	2.9	4.0	263	21.1	20.9	2.6	265	39.2	39.0	3.5	255	47.4	45.7	12.4	246	36.0	32.9	14.6			
29	131	1.1	-0.8	0.7	235	1.2	1.0	0.7	215	7.0	4.0	5.8	260	23.9	23.5	4.3	256	47.2	45.8	11.4	249	38.0	35.5	13.6	264	23.0	22.9	2.4			
30	51	2.2	-1.7	-1.4	219	1.4	0.9	1.1	234	5.7	4.6	3.3	273	15.5	15.5	-0.8	266	43.7	43.6	3.3	261	57.6	56.9	9.0	259	22.0	21.6	4.1			
31	84	1.9	-1.9	-0.2	189	1.2	0.2	1.2	218	5.4	3.3	4.3	258	18.3	17.9	3.7	266	39.5	39.4	3.1	260	58.3	57.3	10.5	261	31.1	30.7	4.7			

Daily Normals of Upper Air Winds (1971-2000)

255

MOHANBARI

MARCH

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	217	0.5	0.3	0.4	219	2.2	1.4	1.7	232	9.3	7.3	5.8	264	16.8	16.7	1.7	255	35.9	34.7	9.2	256	53.8	52.2	13.2	278	29.0	28.7	-3.9			
2	29	1.3	-0.6	-1.1	227	2.5	1.8	1.7	215	6.7	3.9	5.5	255	19.4	18.7	5.0	265	40.0	39.9	3.3	250	45.4	42.6	15.8	239	35.0	30.0	18.0			
3	63	1.1	-1.0	-0.5	260	1.1	1.1	0.2	240	7.3	6.3	3.6	276	13.3	13.2	-1.3	264	34.4	34.2	3.3	262	48.4	47.9	7.0	267	19.8	19.8	1.0			
4	82	2.8	-2.8	-0.4	186	1.8	0.2	1.8	215	6.4	3.7	5.2	261	16.6	16.4	2.5	283	25.0	24.3	-5.7	269	46.0	46.0	0.9	266	18.0	18.0	1.3			
5	55	4.0	-3.3	-2.3	207	1.3	0.6	1.2	225	7.9	5.6	5.6	262	19.9	19.7	2.9	276	37.1	36.9	-4.0	261	45.5	44.9	7.5	264	22.1	22.0	2.5			
6	70	3.5	-3.3	-1.2	209	3.3	1.6	2.9	234	9.9	8.0	5.8	258	20.9	20.4	4.4	280	45.9	45.2	-7.9	266	51.1	51.0	3.8	292	22.8	21.1	-8.7			
7	135	1.8	-1.3	1.3	220	2.5	1.6	1.9	238	9.7	8.2	5.1	261	20.8	20.5	3.3	267	26.3	26.3	1.6	268	32.5	32.5	0.9	257	20.6	20.1	4.7			
8	92	4.7	-4.7	0.2	201	2.2	0.8	2.1	232	8.7	6.8	5.4	260	19.1	18.8	3.2	263	37.0	36.7	4.3	250	38.9	36.5	13.4	246	14.0	12.8	5.7			
9	34	0.4	-0.2	-0.3	217	2.5	1.5	2.0	230	8.5	6.5	5.4	258	19.8	19.4	4.1	266	41.9	41.8	2.7	255	52.9	51.2	13.3	246	50.1	45.9	20.0			
10	92	2.9	-2.9	0.1	212	1.9	1.0	1.6	226	10.8	7.8	7.5	255	22.8	22.1	5.8	263	30.5	30.3	3.7	265	36.8	36.7	2.9	—	—	—	—			
11	67	4.1	-3.8	-1.6	218	1.6	1.0	1.3	236	10.9	9.0	6.1	261	23.1	22.8	3.8	263	38.6	38.3	4.4	260	47.9	47.2	8.0	—	—	—	—			
12	54	2.6	-2.1	-1.5	253	1.7	1.6	0.5	232	12.3	9.7	7.6	259	19.7	19.3	3.8	263	40.1	39.8	5.0	261	39.3	38.8	6.1	263	22.9	22.7	2.9			
13	74	4.0	-3.8	-1.1	206	3.7	1.6	3.3	242	13.3	11.8	6.2	255	20.4	19.7	5.2	260	34.1	33.6	6.1	253	48.4	46.2	14.3	256	22.5	21.8	5.5			
14	75	3.9	-3.8	-1.0	204	2.4	1.0	2.2	228	10.2	7.6	6.8	258	19.2	18.8	4.1	273	31.5	31.5	-1.6	258	24.9	24.4	5.1	—	—	—	—			
15	92	2.3	-2.3	0.1	212	3.6	1.9	3.0	231	9.3	7.2	5.9	252	16.7	15.9	5.1	296	24.1	21.6	-10.7	277	40.3	40.0	-5.0	283	9.9	9.7	-2.2			
16	47	1.9	-1.4	-1.3	238	1.5	1.3	0.8	236	8.2	6.8	4.6	259	16.3	16.0	3.0	272	34.1	34.1	-1.4	276	42.6	42.4	-4.4	251	32.0	30.3	10.4			
17	96	4.0	-4.0	0.4	229	2.8	2.1	1.8	239	11.7	10.0	6.1	264	13.3	13.2	1.4	265	28.1	28.0	2.5	261	46.4	45.8	7.4	269	19.0	19.0	0.3			
18	69	4.3	-4.0	-1.5	225	2.7	1.9	1.9	238	11.8	10.0	6.3	264	19.6	19.5	2.0	282	33.6	32.9	-7.0	269	53.5	53.5	1.2	273	31.0	31.0	-1.6			
19	81	4.9	-4.8	-0.8	225	4.2	3.0	3.0	238	12.9	10.9	6.9	264	18.0	17.9	1.9	275	36.2	36.1	-2.9	268	45.1	45.1	1.3	278	24.4	24.1	-3.6			
20	79	4.6	-4.5	-0.9	216	2.6	1.5	2.1	239	11.0	9.4	5.7	261	20.7	20.5	3.1	284	26.7	25.9	-6.4	274	46.7	46.6	-3.5	266	31.6	31.5	2.2			
21	78	3.0	-2.9	-0.6	224	3.2	2.2	2.3	232	9.9	7.8	6.1	265	18.4	18.3	1.6	273	28.6	28.6	-1.5	268	42.2	42.2	1.3	261	19.9	19.7	3.0			
22	47	4.1	-3.0	-2.8	224	3.0	2.1	2.2	222	9.8	6.5	7.3	254	18.9	18.2	5.2	277	33.6	33.3	-4.1	270	34.6	34.6	-0.1	274	20.9	20.9	-1.3			
23	95	2.1	-2.1	0.2	234	3.2	2.6	1.9	233	13.1	10.4	7.9	255	18.1	17.5	4.6	258	35.6	34.8	7.7	255	43.6	42.0	11.6	269	20.2	20.2	0.3			
24	79	4.3	-4.2	-0.8	226	3.3	2.4	2.3	238	12.8	10.9	6.7	263	18.2	18.1	2.2	263	36.0	35.7	4.4	261	49.4	48.8	7.6	247	28.0	25.8	10.9			
25	76	5.3	-5.1	-1.3	228	3.8	2.8	2.5	237	13.8	11.6	7.4	259	17.1	16.8	3.3	261	27.9	27.5	4.6	258	39.5	38.6	8.2	274	24.0	23.9	-1.8			
26	74	3.7	-3.6	-1.0	167	1.3	-0.3	1.3	239	9.0	7.7	4.6	262	17.9	17.7	2.5	264	28.3	28.1	3.1	255	45.0	43.5	11.7	266	26.3	26.2	1.7			
27	97	2.3	-2.3	0.3	219	4.0	2.5	3.1	231	7.9	6.1	5.0	263	12.7	12.6	1.6	241	23.6	20.6	11.6	259	26.0	25.5	5.0	268	14.3	14.3	0.5			
28	68	2.9	-2.7	-1.1	205	1.4	0.6	1.3	229	6.5	4.9	4.2	274	10.4	10.4	-0.7	285	24.2	23.4	-6.1	263	32.9	32.7	4.0	273	28.5	28.4	-1.7			
29	81	2.6	-2.6	-0.4	234	0.9	0.7	0.5	231	8.3	6.5	5.2	258	15.4	15.0	3.3	283	22.0	21.4	-4.9	279	33.4	32.9	-5.5	269	19.7	19.7	0.4			
30	85	3.6	-3.6	-0.3	205	2.1	0.9	1.9	243	11.0	9.8	5.1	250	15.8	14.8	5.4	255	22.0	21.2	5.8	245	27.3	24.8	11.5	251	24.5	23.2	7.8			
31	135	2.0	-1.4	1.4	234	3.4	2.8	2.0	243	11.0	9.8	5.1	261	13.2	13.0	2.0	281	17.8	17.5	-3.5	276	36.8	36.6	-4.0	290	20.6	19.4	-6.9			

Daily Normals of Upper Air Winds (1971-2000)

256

MOHANBARI

APRIL

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	90	2.2	-2.2	0.0	213	3.7	2.0	3.1	238	11.5	9.7	6.1	244	16.4	14.8	7.1	263	27.4	27.2	3.4	259	29.8	29.2	5.9	286	27.4	26.4	-7.4			
2	82	4.1	-4.1	-0.6	197	2.4	0.7	2.3	239	9.8	8.4	5.0	263	15.8	15.7	2.0	285	37.7	36.4	-9.7	274	39.6	39.5	-2.9	276	17.4	17.3	-1.8			
3	68	1.8	-1.7	-0.7	202	2.4	0.9	2.2	230	11.6	8.9	7.5	250	17.9	16.8	6.1	269	28.5	28.5	0.6	264	33.4	33.2	3.4	258	15.4	15.1	3.1			
4	63	2.0	-1.8	-0.9	225	4.0	2.8	2.8	237	15.3	12.8	8.4	249	17.8	16.7	6.3	263	32.6	32.4	3.8	255	39.0	37.7	10.0	252	8.0	7.6	2.5			
5	64	3.2	-2.9	-1.4	218	3.1	1.9	2.4	232	12.5	9.8	7.7	247	14.3	13.2	5.6	264	33.0	32.8	3.5	262	39.5	39.2	5.2	267	20.0	20.0	1.0			
6	68	3.2	-3.0	-1.2	219	3.5	2.2	2.7	233	11.1	8.8	6.7	252	15.7	15.0	4.8	266	25.9	25.8	1.9	269	31.7	31.7	0.7	260	18.3	18.0	3.2			
7	67	4.7	-4.3	-1.8	151	1.0	-0.5	0.9	235	10.5	8.6	6.1	259	11.9	11.7	2.2	277	30.5	30.3	-3.8	259	38.5	37.8	7.3	—	—	—	—			
8	63	1.1	-1.0	-0.5	203	2.8	1.1	2.6	237	10.8	9.1	5.9	260	13.1	12.9	2.2	266	29.0	28.9	2.1	265	35.6	35.5	3.0	266	18.8	18.8	1.2			
9	128	1.8	-1.4	1.1	234	1.7	1.4	1.0	238	10.6	9.0	5.6	264	12.1	12.0	1.2	263	21.8	21.6	2.6	274	42.0	41.9	-3.2	273	27.8	27.8	-1.6			
10	106	1.5	-1.4	0.4	192	2.4	0.5	2.3	236	11.9	9.8	6.7	251	15.2	14.4	5.0	271	27.8	27.8	-0.3	267	37.6	37.6	1.8	290	18.9	17.7	-6.5			
11	62	1.7	-1.5	-0.8	197	2.4	0.7	2.3	231	12.1	9.4	7.6	252	16.4	15.6	5.1	272	24.8	24.8	-1.0	266	42.3	42.2	2.7	274	23.3	23.2	-1.7			
12	331	1.0	0.5	-0.9	228	2.7	2.0	1.8	232	10.6	8.3	6.6	251	9.4	8.9	3.0	288	25.2	24.0	-7.8	276	35.6	35.4	-3.8	264	15.4	15.3	1.6			
13	63	0.7	-0.6	-0.3	226	3.6	2.6	2.5	231	10.8	8.4	6.8	256	13.3	12.9	3.1	272	27.9	27.9	-1.2	264	42.1	41.9	4.3	233	15.0	12.0	9.0			
14	59	2.3	-2.0	-1.2	254	1.5	1.4	0.4	239	9.7	8.3	5.0	262	13.1	13.0	1.8	272	31.7	31.7	-1.1	269	34.7	34.7	0.6	277	11.0	10.9	-1.3			
15	114	2.0	-1.8	0.8	213	3.1	1.7	2.6	231	11.6	9.0	7.3	254	12.8	12.3	3.6	267	22.7	22.7	1.3	271	33.5	33.5	-0.8	277	15.6	15.5	-2.0			
16	83	2.4	-2.4	-0.3	212	3.2	1.7	2.7	234	11.3	9.2	6.6	251	11.5	10.9	3.8	259	22.8	22.4	4.4	263	34.8	34.5	4.5	271	24.5	24.5	-0.3			
17	72	4.6	-4.4	-1.4	224	3.2	2.2	2.3	234	10.7	8.6	6.3	255	16.4	15.8	4.3	253	23.1	22.1	6.8	251	36.1	34.1	12.0	270	19.9	19.9	-0.1			
18	58	4.1	-3.5	-2.2	208	2.4	1.1	2.1	235	9.6	7.9	5.5	261	11.3	11.2	1.8	264	16.8	16.7	1.7	277	26.9	26.7	-3.2	277	16.3	16.2	-1.9			
19	63	3.4	-3.0	-1.5	209	2.6	1.3	2.3	243	8.9	7.9	4.0	256	9.6	9.3	2.3	284	20.1	19.5	-4.8	267	25.0	25.0	1.3	277	7.0	6.9	-0.9			
20	98	2.2	-2.2	0.3	215	1.2	0.7	1.0	240	5.6	4.9	2.8	262	7.3	7.2	1.0	269	13.1	13.1	0.2	273	22.0	22.0	-1.0	268	10.0	10.0	0.3			
21	60	2.8	-2.4	-1.4	219	1.3	0.8	1.0	238	7.3	6.2	3.9	278	7.9	7.8	-1.1	284	19.8	19.2	-4.9	276	27.7	27.5	-3.0	266	12.7	12.7	0.9			
22	85	2.4	-2.4	-0.2	214	2.2	1.2	1.8	235	8.2	6.7	4.7	250	10.9	10.2	3.7	276	23.2	23.1	-2.4	271	30.6	30.6	-0.7	279	18.0	17.8	-2.8			
23	80	2.3	-2.3	-0.4	191	2.0	0.4	2.0	231	9.0	7.0	5.7	263	10.0	9.9	1.3	263	24.0	23.8	2.8	264	32.3	32.1	3.5	257	17.6	17.2	3.9			
24	63	3.1	-2.8	-1.4	217	3.1	1.9	2.5	232	8.7	6.9	5.3	268	9.5	9.5	0.4	269	26.8	26.8	0.7	261	42.5	42.0	6.4	259	15.7	15.4	3.0			
25	81	4.5	-4.4	-0.7	169	2.0	-0.4	2.0	236	12.2	10.1	6.8	251	10.2	9.7	3.3	263	24.0	23.8	3.0	255	35.2	34.0	9.0	262	19.7	19.5	2.6			
26	61	3.8	-3.3	-1.8	210	2.0	1.0	1.7	226	7.9	5.7	5.5	255	12.2	11.8	3.1	260	31.0	30.6	5.2	251	38.1	36.1	12.2	276	13.3	13.2	-1.4			
27	98	0.7	-0.7	0.1	204	1.7	0.7	1.6	242	7.3	6.5	3.4	254	7.4	7.1	2.1	265	18.3	18.2	1.6	257	28.0	27.3	6.1	265	13.4	13.4	1.1			
28	70	2.0	-1.9	-0.7	212	4.0	2.1	3.4	237	7.8	6.5	4.3	274	5.9	5.9	-0.4	282	17.6	17.2	-3.7	263	26.4	26.2	3.0	276	16.6	16.5	-1.6			
29	114	1.0	-0.9	0.4	197	1.7	0.5	1.6	221	6.3	4.1	4.8	257	8.0	7.8	1.8	275	21.0	20.9	-1.8	266	19.4	19.4	1.3	—	—	—	—			
30	92	2.7	-2.7	0.1	150	0.8	-0.4	0.7	233	6.3	5.0	3.8	272	4.7	4.7	-0.2	269	18.0	18.0	0.4	263	29.2	29.0	3.4	322	8.7	5.4	-6.8			

Daily Normals of Upper Air Winds (1971-2000)

MOHANBARI

MAY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	147	1.7	-0.9	1.4	197	2.1	0.6	2.0	242	7.9	7.0	3.7	277	6.2	6.1	-0.8	277	18.5	18.4	-2.1	274	31.1	31.0	-2.3	314	6.0	4.3	-4.2			
2	82	2.7	-2.7	-0.4	208	2.4	1.1	2.1	226	5.7	4.1	4.0	269	5.8	5.8	0.1	265	11.2	11.2	0.9	269	17.8	17.8	0.3	267	17.0	17.0	0.8			
3	84	2.7	-2.7	-0.3	218	2.4	1.5	1.9	241	5.5	4.8	2.7	268	6.5	6.5	0.2	280	16.9	16.7	-2.9	272	22.7	22.7	-0.9	289	13.1	12.4	-4.2			
4	156	1.0	-0.4	0.9	225	2.4	1.7	1.7	233	6.5	5.2	3.9	269	6.1	6.1	0.1	262	17.6	17.4	2.4	265	25.6	25.5	2.2	285	10.3	10.0	-2.6			
5	110	2.3	-2.2	0.8	213	2.4	1.3	2.0	234	4.8	3.9	2.8	277	6.5	6.5	-0.8	272	19.7	19.7	-0.8	274	27.5	27.4	-1.7	300	12.0	10.4	-6.0			
6	93	3.5	-3.5	0.2	219	1.9	1.2	1.5	235	5.4	4.4	3.1	247	7.0	6.5	2.7	260	15.3	15.1	2.6	262	20.4	20.2	2.9	267	10.2	10.2	0.6			
7	60	3.4	-3.0	-1.7	217	2.1	1.3	1.7	224	6.6	4.6	4.7	246	8.0	7.3	3.3	255	19.7	19.0	5.1	267	23.0	23.0	1.1	282	14.3	14.0	-3.0			
8	42	1.5	-1.0	-1.1	207	1.6	0.7	1.4	232	4.6	3.6	2.8	259	6.4	6.3	1.2	262	22.6	22.4	3.0	253	34.7	33.2	10.1	244	9.9	8.9	4.4			
9	84	0.9	-0.9	-0.1	216	3.1	1.8	2.5	236	6.0	5.0	3.4	258	7.3	7.1	1.5	280	21.9	21.6	-3.9	264	32.2	32.0	3.5	265	23.0	22.9	2.1			
10	58	2.6	-2.2	-1.4	191	2.5	0.5	2.5	225	6.1	4.3	4.3	263	7.3	7.2	0.9	280	18.5	18.2	-3.3	281	33.1	32.5	-6.1	286	15.1	14.5	-4.2			
11	90	0.7	-0.7	0.0	223	4.0	2.7	2.9	236	8.1	6.7	4.6	256	9.6	9.3	2.3	270	21.3	21.3	-0.1	261	29.2	28.8	4.8	266	22.4	22.3	1.6			
12	72	2.0	-1.9	-0.6	227	3.7	2.7	2.5	241	8.8	7.7	4.2	256	11.4	11.1	2.8	263	22.3	22.1	2.8	261	20.7	20.5	3.1	220	5.6	3.6	4.3			
13	189	1.2	0.2	1.2	225	2.8	2.0	2.0	237	6.6	5.5	3.6	262	7.6	7.5	1.0	273	18.2	18.2	-0.9	267	24.2	24.2	1.4	253	7.6	7.3	2.2			
14	255	1.1	1.1	0.3	241	2.9	2.5	1.4	234	4.6	3.7	2.7	256	7.6	7.4	1.9	273	18.2	18.2	-1.1	274	19.2	19.2	-1.3	272	8.6	8.6	-0.3			
15	101	1.6	-1.6	0.3	223	2.5	1.7	1.8	228	5.1	3.8	3.4	256	8.5	8.2	2.1	257	20.0	19.5	4.5	260	20.4	20.1	3.6	272	7.1	7.1	-0.2			
16	90	2.2	-2.2	0.0	217	2.5	1.5	2.0	238	6.2	5.3	3.3	254	10.0	9.6	2.8	260	19.3	19.0	3.3	266	24.7	24.6	1.6	283	9.5	9.2	-2.2			
17	128	1.1	-0.9	0.7	205	3.5	1.5	3.2	237	7.5	6.3	4.1	248	9.5	8.8	3.5	266	20.9	20.8	1.5	262	24.0	23.8	3.3	297	13.2	11.8	-6.0			
18	67	2.5	-2.3	-1.0	155	1.7	-0.7	1.5	230	7.2	5.5	4.6	246	9.4	8.6	3.9	265	24.3	24.2	2.1	261	23.7	23.4	3.6	270	6.5	6.5	0.0			
19	79	3.3	-3.2	-0.6	162	1.9	-0.6	1.8	223	5.0	3.4	3.6	248	11.2	10.4	4.1	255	20.7	20.0	5.3	255	28.6	27.6	7.6	279	10.2	10.1	-1.6			
20	66	1.2	-1.1	-0.5	215	2.4	1.4	2.0	224	4.3	3.0	3.1	248	6.2	5.8	2.3	263	21.0	20.8	2.7	261	23.3	23.0	3.8	305	8.6	7.1	-4.9			
21	99	2.6	-2.6	0.4	217	2.5	1.5	2.0	216	6.1	3.6	4.9	247	7.5	6.9	2.9	264	19.8	19.7	2.0	262	26.0	25.7	3.8	264	7.1	7.1	0.8			
22	117	2.2	-2.0	1.0	204	3.5	1.4	3.2	229	6.0	4.5	3.9	250	12.1	11.3	4.2	258	18.9	18.5	3.8	256	25.9	25.1	6.4	222	10.8	7.2	8.0			
23	93	2.1	-2.1	0.1	218	3.4	2.1	2.7	234	7.9	6.4	4.6	242	10.2	9.0	4.7	249	19.2	17.9	7.0	252	26.4	25.2	8.0	239	6.8	5.8	3.5			
24	117	0.4	-0.4	0.2	219	3.2	2.0	2.5	228	3.9	2.9	2.6	254	7.1	6.8	1.9	263	17.2	17.1	2.2	258	23.0	22.5	4.9	287	6.2	5.9	-1.8			
25	109	2.1	-2.0	0.7	183	1.9	0.1	1.9	218	4.2	2.6	3.3	255	6.8	6.6	1.8	273	19.3	19.3	-1.0	261	21.3	21.1	3.2	278	11.2	11.1	-1.6			
26	153	1.1	-0.5	1.0	228	3.1	2.3	2.1	233	6.1	4.9	3.7	252	9.2	8.7	2.9	263	17.7	17.6	2.1	266	21.0	21.0	1.3	281	5.2	5.1	-1.0			
27	121	1.2	-1.0	0.6	219	3.3	2.1	2.6	223	5.0	3.4	3.7	244	8.0	7.2	3.5	251	16.3	15.4	5.3	264	25.4	25.3	2.6	309	3.5	2.7	-2.2			
28	126	2.4	-1.9	1.4	214	2.5	1.4	2.1	228	6.2	4.6	4.1	252	6.6	6.3	2.1	273	19.2	19.2	-1.1	270	21.1	21.1	-0.1	248	1.8	1.7	0.7			
29	111	1.9	-1.8	0.7	225	3.8	2.7	2.7	217	5.5	3.3	4.4	242	7.9	7.0	3.7	260	16.3	16.1	2.8	264	18.9	18.8	2.0	285	3.0	2.9	-0.8			
30	72	2.6	-2.5	-0.8	215	2.4	1.4	2.0	231	6.3	4.9	4.0	268	7.3	7.3	0.3	264	18.6	18.5	1.8	263	20.7	20.6	2.4	212	1.3	0.7	1.1			
31	98	1.5	-1.5	0.2	214	4.6	2.6	3.8	223	5.6	3.8	4.1	274	4.7	4.7	-0.3	273	16.5	16.5	-0.8	263	21.7	21.5	2.6	220	9.9	6.4	7.5			

Daily Normals of Upper Air Winds (1971-2000)

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MOHANBARI

JUNE

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	82	0.7	-0.7	-0.1	233	3.9	3.1	2.3	230	6.0	4.6	3.9	262	3.0	3.0	0.4	267	15.6	15.6	0.9	273	20.1	20.1	-1.0	268	6.2	6.2	0.2			
2	68	1.6	-1.5	-0.6	210	2.4	1.2	2.1	213	3.3	1.8	2.8	263	4.6	4.6	0.6	253	12.8	12.3	3.7	265	15.3	15.2	1.3	210	1.4	0.7	1.2			
3	158	1.1	-0.4	1.0	210	2.8	1.4	2.4	225	4.8	3.4	3.4	244	5.8	5.2	2.5	257	13.0	12.6	3.0	267	14.3	14.3	0.8	230	2.5	1.9	1.6			
4	113	1.3	-1.2	0.5	219	3.8	2.4	3.0	220	4.8	3.1	3.7	250	6.6	6.2	2.3	249	12.3	11.5	4.3	263	12.7	12.6	1.5	310	8.0	6.1	-5.1			
5	117	1.6	-1.4	0.7	219	4.5	2.8	3.5	227	5.9	4.3	4.0	247	6.7	6.2	2.6	260	14.0	13.8	2.4	253	16.4	15.6	4.9	322	4.1	2.5	-3.2			
6	108	1.6	-1.5	0.5	219	2.6	1.6	2.0	230	6.0	4.6	3.8	252	9.7	9.2	3.0	271	10.9	10.9	-0.1	267	11.6	11.6	0.6	333	1.8	0.8	-1.6			
7	115	1.4	-1.3	0.6	250	1.5	1.4	0.5	230	5.4	4.1	3.5	251	6.9	6.5	2.3	277	11.7	11.6	-1.4	276	16.4	16.3	-1.6	333	2.0	0.9	-1.8			
8	90	2.6	-2.6	0.0	220	3.3	2.1	2.5	218	6.1	3.8	4.8	251	6.8	6.4	2.2	271	11.8	11.8	-0.2	280	14.6	14.4	-2.5	326	5.0	2.8	-4.2			
9	115	1.4	-1.3	0.6	211	2.9	1.5	2.5	207	4.2	1.9	3.8	239	4.7	4.0	2.4	273	11.0	11.0	-0.5	272	14.2	14.2	-0.5	351	5.2	0.8	-5.1			
10	196	1.5	0.4	1.4	209	2.9	1.4	2.5	209	5.5	2.7	4.8	241	6.2	5.4	3.0	264	9.0	8.9	1.0	274	10.5	10.5	-0.8	25	2.1	-0.9	-1.9			
11	108	1.9	-1.8	0.6	227	2.5	1.8	1.7	221	4.8	3.1	3.6	254	6.9	6.6	1.9	265	10.4	10.4	0.9	279	11.6	11.4	-1.9	4	2.7	-0.2	-2.7			
12	94	2.6	-2.6	0.2	190	2.3	0.4	2.3	219	5.0	3.2	3.9	240	4.4	3.8	2.2	261	7.3	7.2	1.2	268	14.3	14.3	0.4	90	6.3	-6.3	0.0			
13	144	0.9	-0.5	0.7	211	3.3	1.7	2.8	218	5.1	3.1	4.0	247	5.8	5.3	2.3	268	7.0	7.0	0.3	322	7.5	4.6	-5.9	84	6.2	-6.2	-0.6			
14	213	2.0	1.1	1.7	223	2.2	1.5	1.6	229	6.1	4.6	4.0	238	6.2	5.2	3.3	269	7.9	7.9	0.1	282	9.0	8.8	-1.8	105	3.0	-2.9	0.8			
15	225	1.4	1.0	1.0	210	3.0	1.5	2.6	219	6.6	4.2	5.1	244	6.4	5.8	2.8	286	6.4	6.1	-1.8	290	9.3	8.7	-3.2	43	4.2	-2.9	-3.1			
16	137	2.5	-1.7	1.8	226	3.3	2.4	2.3	225	5.2	3.7	3.7	250	4.4	4.1	1.5	313	4.2	3.1	-2.9	298	7.0	6.2	-3.3	37	8.0	-4.8	-6.4			
17	127	2.1	-1.7	1.3	209	2.1	1.0	1.8	215	5.5	3.2	4.5	224	3.3	2.3	2.4	239	6.6	5.7	3.4	314	5.7	4.1	-4.0	64	7.5	-6.7	-3.3			
18	170	1.1	-0.2	1.1	213	3.5	1.9	2.9	213	5.0	2.7	4.2	229	6.7	5.1	4.4	245	5.5	5.0	2.3	268	6.5	6.5	0.2	46	3.3	-2.4	-2.3			
19	115	1.9	-1.7	0.8	194	1.2	0.3	1.2	199	4.3	1.4	4.1	245	7.6	6.9	3.2	273	6.1	6.1	-0.3	281	9.6	9.4	-1.9	83	4.0	-4.0	-0.5			
20	81	1.2	-1.2	-0.2	196	1.8	0.5	1.7	212	4.0	2.1	3.4	223	5.3	3.6	3.9	255	3.9	3.8	1.0	257	4.9	4.8	1.1	85	5.0	-5.0	-0.4			
21	185	2.5	0.2	2.5	216	3.7	2.2	3.0	226	6.1	4.4	4.2	243	5.1	4.6	2.3	281	5.4	5.3	-1.0	301	8.5	7.3	-4.4	18	12.7	-4.0	-12.1			
22	86	4.0	-4.0	-0.3	208	3.4	1.6	3.0	233	6.0	4.8	3.6	240	4.2	3.6	2.1	280	3.4	3.3	-0.6	305	2.8	2.3	-1.6	50	8.7	-6.6	-5.6			
23	95	2.2	-2.2	0.2	211	2.9	1.5	2.5	226	6.5	4.7	4.5	237	6.4	5.4	3.5	276	9.3	9.2	-1.0	272	9.7	9.7	-0.3	353	7.8	1.0	-7.7			
24	79	4.9	-4.8	-0.9	226	3.0	2.2	2.1	223	5.4	3.7	3.9	253	5.7	5.4	1.7	284	6.0	5.8	-1.4	336	8.5	3.4	-7.8	30	9.0	-4.5	-7.8			
25	21	1.4	-0.5	-1.3	207	1.3	0.6	1.2	205	4.1	1.7	3.7	246	3.6	3.3	1.5	266	6.3	6.3	0.4	311	8.0	6.0	-5.3	25	7.3	-3.1	-6.6			
26	31	1.2	-0.6	-1.0	213	3.0	1.6	2.5	207	3.9	1.8	3.5	232	3.7	2.9	2.3	273	5.4	5.4	-0.3	278	6.2	6.1	-0.9	36	13.4	-7.9	-10.8			
27	148	1.5	-0.8	1.3	219	3.2	2.0	2.5	213	4.6	2.5	3.9	246	3.9	3.6	1.6	270	3.1	3.1	0.0	297	5.8	5.2	-2.6	54	12.3	-10.0	-7.2			
28	177	1.7	-0.1	1.7	210	2.4	1.2	2.1	218	5.4	3.3	4.3	238	4.9	4.1	2.6	277	4.0	4.0	-0.5	298	6.1	5.4	-2.9	72	11.1	-10.6	-3.4			
29	135	1.6	-1.1	1.1	216	3.2	1.9	2.6	215	5.7	3.3	4.7	235	5.5	4.5	3.1	278	2.1	2.1	-0.3	4	1.6	-0.1	-1.6	78	15.7	-15.4	-3.3			
30	122	1.9	-1.6	1.0	227	3.8	2.8	2.6	221	6.2	4.1	4.7	232	5.6	4.4	3.4	350	1.7	0.3	-1.7	338	1.8	0.7	-1.7	70	12.9	-12.1	-4.4			

Daily Normals of Upper Air Winds (1971-2000)

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MOHANBARI

JULY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	90	2.3	-2.3	0.0	222	4.0	2.7	3.0	221	6.9	4.6	5.2	227	5.0	3.7	3.4	223	2.3	1.6	1.7	334	2.5	1.1	-2.3	67	13.9	-12.8	-5.4			
2	75	1.6	-1.5	-0.4	222	4.3	2.9	3.2	220	6.2	4.0	4.8	226	5.5	4.0	3.8	270	2.8	2.8	0.0	353	4.3	0.5	-4.3	61	11.5	-10.0	-5.6			
3	95	2.5	-2.5	0.2	236	6.2	5.1	3.5	229	8.3	6.3	5.4	242	3.2	2.8	1.5	315	2.7	1.9	-1.9	7	6.6	-0.8	-6.6	54	11.4	-9.2	-6.8			
4	360	0.3	0.0	-0.3	222	4.5	3.0	3.3	228	7.3	5.4	4.9	241	3.8	3.3	1.8	355	1.1	0.1	-1.1	40	3.9	-2.5	-3.0	70	13.1	-12.3	-4.5			
5	103	2.7	-2.6	0.6	226	4.2	3.0	2.9	228	6.7	5.0	4.5	239	4.5	3.9	2.3	272	2.6	2.6	-0.1	328	3.4	1.8	-2.9	58	7.4	-6.3	-3.9			
6	188	3.0	0.4	3.0	226	5.7	4.1	3.9	230	5.9	4.5	3.8	264	3.9	3.9	0.4	321	4.1	2.6	-3.2	7	6.4	-0.8	-6.3	100	10.7	-10.5	1.8			
7	132	1.2	-0.9	0.8	232	4.9	3.9	3.0	231	5.6	4.4	3.5	251	4.2	4.0	1.4	23	3.0	-1.2	-2.8	49	7.7	-5.8	-5.0	74	10.2	-9.8	-2.8			
8	227	1.8	1.3	1.2	231	4.8	3.7	3.0	228	6.0	4.5	4.0	241	3.9	3.4	1.9	347	1.7	0.4	-1.7	82	5.2	-5.2	-0.7	93	10.9	-10.9	0.5			
9	141	0.6	-0.4	0.5	228	4.2	3.1	2.8	234	6.5	5.3	3.8	265	1.2	1.2	0.1	319	3.8	2.5	-2.9	346	1.2	0.3	-1.2	56	9.4	-7.8	-5.3			
10	180	0.1	0.0	0.1	227	4.2	3.1	2.9	221	4.0	2.6	3.0	242	1.7	1.5	0.8	355	3.8	0.3	-3.8	18	4.0	-1.2	-3.8	55	11.3	-9.2	-6.5			
11	127	0.5	-0.4	0.3	224	2.9	2.0	2.1	218	4.3	2.7	3.4	233	2.5	2.0	1.5	329	2.7	1.4	-2.3	327	3.1	1.7	-2.6	52	14.9	-11.8	-9.1			
12	172	1.5	-0.2	1.5	221	4.1	2.7	3.1	220	5.3	3.4	4.1	253	2.1	2.0	0.6	304	4.0	3.3	-2.2	295	3.1	2.8	-1.3	64	13.1	-11.8	-5.7			
13	72	1.3	-1.2	-0.4	227	5.1	3.7	3.5	223	6.5	4.4	4.8	244	4.1	3.7	1.8	327	4.9	2.7	-4.1	15	10.6	-2.7	-10.2	48	9.0	-6.7	-6.0			
14	75	1.1	-1.1	-0.3	223	4.8	3.3	3.5	230	5.5	4.2	3.5	258	3.5	3.4	0.7	354	3.1	0.3	-3.1	27	7.7	-3.5	-6.9	55	11.9	-9.8	-6.8			
15	222	1.2	0.8	0.9	227	5.0	3.6	3.4	233	6.4	5.1	3.9	239	4.4	3.8	2.3	15	3.8	-1.0	-3.7	42	10.0	-6.7	-7.4	43	19.7	-13.3	-14.5			
16	180	2.3	0.0	2.3	221	4.6	3.0	3.5	235	4.7	3.8	2.7	180	0.4	0.0	0.4	359	4.7	0.1	-4.7	354	6.6	0.7	-6.6	55	12.8	-10.4	-7.4			
17	90	0.4	-0.4	0.0	222	4.5	3.0	3.3	225	4.4	3.1	3.1	287	1.0	1.0	-0.3	312	3.0	2.2	-2.0	14	4.5	-1.1	-4.4	49	11.8	-9.0	-7.7			
18	218	3.3	2.0	2.6	223	4.9	3.3	3.6	233	5.0	4.0	3.0	274	1.5	1.5	-0.1	328	3.4	1.8	-2.9	4	4.1	-0.3	-4.1	53	15.8	-12.7	-9.4			
19	169	1.0	-0.2	1.0	212	3.6	1.9	3.0	213	4.5	2.5	3.8	238	0.9	0.8	0.5	19	2.8	-0.9	-2.6	15	7.3	-1.9	-7.1	60	16.2	-14.0	-8.2			
20	203	2.1	0.8	1.9	227	2.2	1.6	1.5	209	3.1	1.5	2.7	148	0.9	-0.5	0.8	345	3.0	0.8	-2.9	39	3.6	-2.3	-2.8	61	12.2	-10.7	-5.9			
21	222	1.3	0.9	1.0	214	2.7	1.5	2.2	232	4.4	3.5	2.7	153	1.3	-0.6	1.2	4	2.8	-0.2	-2.8	42	6.0	-4.0	-4.5	77	12.1	-11.8	-2.8			
22	222	1.2	0.8	0.9	232	4.2	3.3	2.6	234	4.9	4.0	2.9	200	1.2	0.4	1.1	41	4.1	-2.7	-3.1	29	9.6	-4.7	-8.4	77	13.9	-13.5	-3.2			
23	207	0.9	0.4	0.8	230	3.9	3.0	2.5	226	4.6	3.3	3.2	207	0.7	0.3	0.6	51	4.8	-3.7	-3.0	54	10.5	-8.5	-6.2	72	12.6	-12.0	-3.8			
24	148	0.9	-0.5	0.8	225	3.3	2.3	2.3	217	3.9	2.3	3.1	277	1.6	1.6	-0.2	42	3.6	-2.4	-2.7	27	12.6	-5.8	-11.2	60	14.3	-12.4	-7.1			
25	186	0.9	0.1	0.9	221	4.4	2.9	3.3	206	4.8	2.1	4.3	204	1.7	0.7	1.6	52	3.3	-2.6	-2.0	45	8.3	-5.8	-5.9	68	11.7	-10.8	-4.4			
26	63	1.3	-1.2	-0.6	214	4.1	2.3	3.4	214	5.0	2.8	4.1	161	1.8	-0.6	1.7	61	3.1	-2.7	-1.5	71	7.4	-7.0	-2.4	71	15.3	-14.5	-4.9			
27	72	0.6	-0.6	-0.2	225	4.2	3.0	3.0	222	4.6	3.1	3.4	202	1.8	0.7	1.7	67	3.8	-3.5	-1.5	67	5.8	-5.3	-2.3	53	13.5	-10.8	-8.1			
28	159	1.9	-0.7	1.8	223	5.2	3.5	3.8	240	4.2	3.6	2.1	257	2.3	2.2	0.5	47	3.8	-2.8	-2.6	37	9.6	-5.8	-7.6	75	16.7	-16.1	-4.3			
29	27	0.7	-0.3	-0.6	221	4.1	2.7	3.1	233	4.1	3.3	2.5	222	2.4	1.6	1.8	355	4.5	0.4	-4.5	24	5.5	-2.2	-5.0	77	16.5	-16.1	-3.8			
30	90	1.3	-1.3	0.0	213	3.1	1.7	2.6	200	3.5	1.2	3.3	252	0.6	0.6	0.2	18	5.2	-1.6	-5.0	23	8.6	-3.4	-7.9	69	13.1	-12.3	-4.6			
31	61	1.8	-1.6	-0.9	165	1.6	-0.4	1.5	187	2.6	0.3	2.6	162	1.3	-0.4	1.2	15	2.0	-0.5	-1.9	53	6.4	-5.1	-3.9	61	10.2	-8.9	-5.0			

Daily Normals of Upper Air Winds (1971-2000)

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MOHANBARI

AUGUST

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	180	1.1	0.0	1.1	203	2.1	0.8	1.9	202	3.5	1.3	3.3	164	0.7	-0.2	0.7	25	2.9	-1.2	-2.6	33	7.8	-4.3	-6.5	78	16.4	-16.1	-3.3			
2	189	1.3	0.2	1.3	211	1.7	0.9	1.5	207	3.7	1.7	3.3	157	1.5	-0.6	1.4	76	3.7	-3.6	-0.9	33	5.9	-3.2	-4.9	79	15.8	-15.5	-2.9			
3	218	1.1	0.7	0.9	211	2.7	1.4	2.3	221	2.9	1.9	2.2	172	0.7	-0.1	0.7	29	2.6	-1.3	-2.3	356	4.2	0.3	-4.2	86	14.6	-14.6	-1.1			
4	144	0.9	-0.5	0.7	236	3.2	2.7	1.8	220	2.6	1.7	2.0	101	2.6	-2.6	0.5	27	4.2	-1.9	-3.8	10	5.9	-1.0	-5.8	79	14.5	-14.2	-2.7			
5	222	1.5	1.0	1.1	223	2.6	1.8	1.9	221	2.1	1.4	1.6	113	2.6	-2.4	1.0	55	4.9	-4.0	-2.8	64	6.2	-5.6	-2.7	71	14.1	-13.3	-4.7			
6	238	0.9	0.8	0.5	204	2.0	0.8	1.8	201	2.6	0.9	2.4	119	1.0	-0.9	0.5	61	4.5	-3.9	-2.2	63	7.4	-6.6	-3.4	65	10.6	-9.6	-4.4			
7	180	2.1	0.0	2.1	215	1.9	1.1	1.6	215	2.9	1.7	2.4	132	1.3	-1.0	0.9	65	4.4	-4.0	-1.9	32	10.9	-5.7	-9.3	59	13.2	-11.3	-6.8			
8	103	1.3	-1.3	0.3	210	2.0	1.0	1.7	218	4.1	2.5	3.2	72	1.6	-1.5	-0.5	40	3.3	-2.1	-2.5	45	9.5	-6.7	-6.8	67	11.4	-10.5	-4.5			
9	279	0.6	0.6	-0.1	229	1.8	1.4	1.2	211	3.1	1.6	2.7	232	1.6	1.3	1.0	4	1.6	-0.1	-1.6	47	6.5	-4.8	-4.4	68	11.5	-10.7	-4.3			
10	202	0.5	0.2	0.5	224	3.9	2.7	2.8	211	4.4	2.3	3.8	270	2.9	2.9	0.0	349	4.2	0.8	-4.1	36	5.4	-3.2	-4.4	59	11.5	-9.9	-5.9			
11	107	1.7	-1.6	0.5	217	2.5	1.5	2.0	213	4.2	2.3	3.5	176	1.4	-0.1	1.4	94	1.3	-1.3	0.1	46	8.0	-5.7	-5.6	75	12.3	-11.9	-3.2			
12	172	1.5	-0.2	1.5	215	2.8	1.6	2.3	207	4.2	1.9	3.7	192	1.4	0.3	1.4	8	2.7	-0.4	-2.7	35	9.3	-5.4	-7.6	47	9.6	-7.0	-6.5			
13	74	0.7	-0.7	-0.2	204	1.7	0.7	1.6	213	4.4	2.4	3.7	254	3.3	3.2	0.9	26	4.1	-1.8	-3.7	70	4.7	-4.4	-1.6	85	16.1	-16.0	-1.4			
14	101	1.5	-1.5	0.3	205	1.7	0.7	1.5	219	3.6	2.3	2.8	166	0.8	-0.2	0.8	52	5.3	-4.2	-3.3	74	6.4	-6.1	-1.8	76	14.5	-14.0	-3.6			
15	69	1.4	-1.3	-0.5	212	2.2	1.2	1.9	218	3.3	2.0	2.6	270	0.8	0.8	0.0	31	3.9	-2.0	-3.3	69	6.9	-6.4	-2.5	76	11.0	-10.7	-2.7			
16	256	0.8	0.8	0.2	227	2.1	1.5	1.4	192	2.9	0.6	2.8	218	2.8	1.7	2.2	51	2.8	-2.2	-1.8	42	5.0	-3.3	-3.7	65	14.0	-12.6	-6.0			
17	239	1.2	1.0	0.6	229	2.9	2.2	1.9	220	3.3	2.1	2.5	202	1.8	0.7	1.7	50	5.3	-4.1	-3.4	21	7.4	-2.6	-6.9	82	13.7	-13.6	-1.8			
18	270	0.2	0.2	0.0	221	2.0	1.3	1.5	201	3.1	1.1	2.9	280	2.2	2.2	-0.4	324	2.2	1.3	-1.8	347	3.5	0.8	-3.4	82	13.2	-13.1	-1.9			
19	70	1.2	-1.1	-0.4	219	2.2	1.4	1.7	211	2.7	1.4	2.3	263	1.6	1.6	0.2	48	3.8	-2.8	-2.5	51	7.5	-5.9	-4.7	73	12.1	-11.5	-3.6			
20	63	0.4	-0.4	-0.2	227	1.8	1.3	1.2	203	3.6	1.4	3.3	225	0.6	0.4	0.4	15	4.6	-1.2	-4.4	344	6.3	1.7	-6.1	71	14.5	-13.7	-4.8			
21	115	1.7	-1.5	0.7	219	2.6	1.6	2.0	185	3.8	0.3	3.8	227	1.6	1.2	1.1	328	2.5	1.3	-2.1	28	4.4	-2.1	-3.9	57	11.8	-9.9	-6.4			
22	218	1.1	0.7	0.9	221	2.9	1.9	2.2	226	4.9	3.5	3.4	207	0.7	0.3	0.6	30	3.2	-1.6	-2.8	35	5.5	-3.1	-4.5	63	8.1	-7.2	-3.7			
23	225	1.1	0.8	0.8	231	2.7	2.1	1.7	230	3.1	2.4	2.0	196	0.7	0.2	0.7	297	2.0	1.8	-0.9	26	2.5	-1.1	-2.3	96	9.7	-9.6	1.0			
24	51	0.6	-0.5	-0.4	216	3.2	1.9	2.6	240	4.0	3.5	2.0	207	1.8	0.8	1.6	328	0.9	0.5	-0.8	27	3.9	-1.8	-3.5	42	6.0	-4.0	-4.5			
25	45	1.1	-0.8	-0.8	203	2.6	1.0	2.4	210	3.8	1.9	3.3	162	1.3	-0.4	1.2	18	2.3	-0.7	-2.2	35	7.3	-4.2	-6.0	83	13.0	-12.9	-1.6			
26	96	1.8	-1.8	0.2	206	2.5	1.1	2.3	218	3.6	2.2	2.8	228	2.8	2.1	1.9	99	0.6	-0.6	0.1	32	4.0	-2.1	-3.4	63	8.6	-7.7	-3.9			
27	75	1.6	-1.5	-0.4	210	1.6	0.8	1.4	199	4.0	1.3	3.8	209	2.5	1.2	2.2	332	1.5	0.7	-1.3	352	3.0	0.4	-3.0	71	11.8	-11.2	-3.8			
28	37	1.5	-0.9	-1.2	208	1.9	0.9	1.7	218	4.2	2.6	3.3	259	1.6	1.6	0.3	42	2.4	-1.6	-1.8	42	1.5	-1.0	-1.1	83	7.9	-7.8	-1.0			
29	62	1.7	-1.5	-0.8	207	1.8	0.8	1.6	226	2.9	2.1	2.0	212	1.3	0.7	1.1	284	4.1	4.0	-1.0	315	4.5	3.2	-3.2	40	6.2	-4.0	-4.8			
30	67	3.0	-2.8	-1.2	200	2.3	0.8	2.2	219	3.2	2.0	2.5	242	2.4	2.1	1.1	45	2.8	-2.0	-2.0	352	3.7	0.5	-3.7	72	11.3	-10.7	-3.5			
31	82	1.4	-1.4	-0.2	208	2.7	1.3	2.4	204	3.5	1.4	3.2	186	0.9	0.1	0.9	51	2.1	-1.6	-1.3	347	7.4	1.6	-7.2	83	8.1	-8.0	-1.0			

Daily Normals of Upper Air Winds (1971-2000)

261

MOHANBARI

SEPTEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	77	1.8	-1.8	-0.4	207	1.8	0.8	1.6	220	4.3	2.8	3.3	225	1.6	1.1	1.1	54	5.8	-4.7	-3.4	28	7.0	-3.3	-6.2	67	5.8	-5.3	-2.3			
2	126	0.9	-0.7	0.5	223	3.7	2.5	2.7	228	4.3	3.2	2.9	238	3.1	2.6	1.6	66	3.2	-2.9	-1.3	26	5.7	-2.5	-5.1	35	7.0	-4.0	-5.7			
3	105	1.6	-1.5	0.4	184	1.6	0.1	1.6	227	4.2	3.1	2.9	248	3.5	3.3	1.3	325	3.2	1.8	-2.6	8	5.8	-0.8	-5.7	54	5.2	-4.2	-3.1			
4	185	1.1	0.1	1.1	211	2.9	1.5	2.5	218	4.3	2.7	3.4	226	3.5	2.5	2.4	292	3.7	3.4	-1.4	302	5.3	4.5	-2.8	57	4.4	-3.7	-2.4			
5	31	0.6	-0.3	-0.5	176	1.5	-0.1	1.5	209	4.5	2.2	3.9	264	1.8	1.8	0.2	332	2.4	1.1	-2.1	331	3.9	1.9	-3.4	60	8.1	-7.0	-4.1			
6	243	0.2	0.2	0.1	211	2.6	1.3	2.2	207	3.7	1.7	3.3	237	2.0	1.7	1.1	355	1.2	0.1	-1.2	348	4.7	1.0	-4.6	62	7.8	-6.9	-3.6			
7	315	0.3	0.2	-0.2	197	1.4	0.4	1.3	207	2.8	1.3	2.5	222	2.4	1.6	1.8	339	1.9	0.7	-1.8	5	3.2	-0.3	-3.2	59	4.8	-4.1	-2.5			
8	174	1.0	-0.1	1.0	221	1.8	1.2	1.4	221	3.0	2.0	2.3	236	2.5	2.1	1.4	323	3.0	1.8	-2.4	339	1.4	0.5	-1.3	93	8.0	-8.0	0.4			
9	138	1.2	-0.8	0.9	201	1.9	0.7	1.8	216	3.7	2.2	3.0	221	3.3	2.2	2.5	25	3.5	-1.5	-3.2	11	0.5	-0.1	-0.5	93	13.0	-13.0	0.6			
10	138	1.5	-1.0	1.1	208	2.1	1.0	1.9	218	3.7	2.3	2.9	217	3.8	2.3	3.0	294	1.7	1.6	-0.7	293	3.9	3.6	-1.5	81	8.2	-8.1	-1.3			
11	131	0.9	-0.7	0.6	216	2.2	1.3	1.8	221	4.1	2.7	3.1	238	3.6	3.1	1.9	319	4.0	2.6	-3.0	323	4.9	2.9	-3.9	66	6.8	-6.2	-2.8			
12	124	1.1	-0.9	0.6	223	3.3	2.2	2.4	232	5.2	4.1	3.2	245	5.5	5.0	2.3	296	3.0	2.7	-1.3	264	3.6	3.6	0.4	75	6.3	-6.1	-1.6			
13	99	0.6	-0.6	0.1	223	4.8	3.3	3.5	240	6.9	6.0	3.5	245	3.1	2.8	1.3	283	5.5	5.4	-1.2	280	10.3	10.1	-1.8	162	2.8	-0.9	2.7			
14	183	2.1	0.1	2.1	225	4.0	2.8	2.8	227	5.0	3.7	3.4	239	4.7	4.0	2.4	253	5.5	5.3	1.6	262	9.8	9.7	1.4	61	1.8	-1.6	-0.9			
15	105	2.4	-2.3	0.6	217	3.5	2.1	2.8	228	5.4	4.0	3.6	243	5.1	4.5	2.3	259	8.9	8.7	1.7	302	13.9	11.8	-7.4	236	5.0	4.1	2.8			
16	101	1.0	-1.0	0.2	195	1.6	0.4	1.5	219	4.3	2.7	3.3	249	5.0	4.7	1.8	268	5.6	5.6	0.2	285	7.8	7.5	-2.0	59	1.2	-1.0	-0.6			
17	146	1.4	-0.8	1.2	207	2.5	1.1	2.2	228	4.6	3.4	3.1	249	5.7	5.3	2.0	264	9.9	9.8	1.0	323	6.5	3.9	-5.2	110	2.3	-2.2	0.8			
18	227	1.6	1.2	1.1	233	2.5	2.0	1.5	233	4.0	3.2	2.4	265	4.2	4.2	0.4	276	9.8	9.7	-1.0	298	10.4	9.2	-4.8	276	6.4	6.4	-0.7			
19	77	2.2	-2.1	-0.5	207	2.2	1.0	2.0	219	3.2	2.0	2.5	258	5.5	5.4	1.1	263	8.7	8.6	1.1	282	8.6	8.4	-1.8	148	6.4	-3.4	5.4			
20	240	0.8	0.7	0.4	205	2.6	1.1	2.4	221	4.0	2.6	3.0	258	5.2	5.1	1.1	261	7.9	7.8	1.3	266	8.5	8.5	0.6	190	4.6	0.8	4.5			
21	68	1.6	-1.5	-0.6	217	1.5	0.9	1.2	220	4.0	2.6	3.1	267	5.4	5.4	0.3	278	9.7	9.6	-1.3	267	10.8	10.8	0.5	233	0.5	0.4	0.3			
22	166	0.8	-0.2	0.8	203	2.1	0.8	1.9	223	4.7	3.2	3.4	264	3.8	3.8	0.4	278	9.7	9.6	-1.3	284	16.5	16.0	-4.1	264	8.1	8.1	0.9			
23	97	1.7	-1.7	0.2	189	1.3	0.2	1.3	236	4.2	3.5	2.4	262	5.3	5.3	0.7	279	10.4	10.3	-1.6	279	15.5	15.3	-2.5	224	3.7	2.6	2.7			
24	189	0.6	0.1	0.6	207	2.2	1.0	2.0	222	5.4	3.6	4.0	265	5.7	5.7	0.5	275	11.7	11.6	-1.1	289	14.0	13.2	-4.6	209	1.0	0.5	0.9			
25	62	1.9	-1.7	-0.9	208	1.5	0.7	1.3	225	4.4	3.1	3.1	256	6.0	5.8	1.4	279	10.7	10.6	-1.6	299	7.6	6.6	-3.7	279	3.0	3.0	-0.5			
26	81	2.0	-2.0	-0.3	213	3.0	1.6	2.5	236	5.0	4.2	2.8	242	6.9	6.1	3.2	282	11.8	11.5	-2.5	278	14.8	14.7	-2.0	289	2.4	2.3	-0.8			
27	146	1.4	-0.8	1.2	220	2.6	1.7	2.0	227	4.9	3.6	3.3	258	6.9	6.8	1.4	261	13.9	13.7	2.2	270	14.5	14.5	-0.1	266	4.0	4.0	0.3			
28	90	1.3	-1.3	0.0	186	1.9	0.2	1.9	223	5.2	3.5	3.8	263	7.8	7.7	0.9	264	12.5	12.4	1.2	286	17.0	16.3	-4.8	254	6.1	5.9	1.7			
29	137	2.2	-1.5	1.6	201	2.5	0.9	2.3	220	5.5	3.5	4.2	255	8.1	7.8	2.1	257	13.0	12.7	3.0	266	16.8	16.7	1.3	252	4.4	4.2	1.4			
30	53	0.5	-0.4	-0.3	209	2.6	1.3	2.3	226	4.3	3.1	3.0	256	7.1	6.9	1.7	270	13.1	13.1	-0.1	284	11.7	11.4	-2.8	342	2.0	0.6	-1.9			

Daily Normals of Upper Air Winds (1971-2000)

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MOHANBARI

OCTOBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	86	1.3	-1.3	-0.1	215	1.9	1.1	1.6	228	4.8	3.6	3.2	247	9.2	8.5	3.6	256	13.1	12.7	3.2	272	14.0	14.0	-0.4	235	3.2	2.6	1.8			
2	104	1.2	-1.2	0.3	203	1.3	0.5	1.2	225	3.1	2.2	2.2	264	6.0	6.0	0.6	263	13.1	13.0	1.6	255	15.5	14.9	4.1	285	7.3	7.1	-1.9			
3	36	1.7	-1.0	-1.4	194	1.6	0.4	1.6	217	4.4	2.6	3.5	263	8.2	8.1	1.0	271	10.3	10.3	-0.1	287	13.4	12.8	-3.8	238	2.5	2.1	1.3			
4	77	1.7	-1.7	-0.4	193	1.3	0.3	1.3	220	3.5	2.3	2.7	258	9.5	9.3	2.0	262	15.6	15.4	2.3	282	16.2	15.8	-3.4	231	6.8	5.3	4.3			
5	90	1.7	-1.7	0.0	209	2.6	1.3	2.3	228	4.0	3.0	2.7	249	9.2	8.6	3.3	262	18.7	18.5	2.6	267	15.3	15.3	0.9	270	4.1	4.1	0.0			
6	145	1.2	-0.7	1.0	209	2.5	1.2	2.2	230	5.6	4.3	3.6	250	9.6	9.0	3.2	264	18.8	18.7	2.1	270	20.1	20.1	0.1	225	4.1	2.9	2.9			
7	81	1.3	-1.3	-0.2	193	1.7	0.4	1.7	210	3.4	1.7	3.0	249	11.6	10.9	4.1	272	16.9	16.9	-0.6	278	19.5	19.3	-2.7	330	2.0	1.0	-1.7			
8	153	0.2	-0.1	0.2	174	1.9	-0.2	1.9	234	4.7	3.8	2.8	258	10.2	10.0	2.2	270	20.8	20.8	0.1	264	23.0	22.9	2.4	260	7.7	7.6	1.4			
9	124	0.7	-0.6	0.4	221	2.0	1.3	1.5	215	5.5	3.2	4.5	260	11.4	11.2	2.0	264	22.5	22.4	2.3	272	24.7	24.7	-0.9	259	7.2	7.1	1.4			
10	104	0.8	-0.8	0.2	158	1.1	-0.4	1.0	232	5.3	4.2	3.3	257	12.3	12.0	2.8	271	20.1	20.1	-0.3	277	24.1	23.9	-2.9	258	13.8	13.5	2.8			
11	278	0.7	0.7	-0.1	174	0.9	-0.1	0.9	227	5.6	4.1	3.8	254	11.1	10.7	3.1	267	20.5	20.5	1.2	256	27.8	27.0	6.8	252	17.7	16.8	5.5			
12	86	1.3	-1.3	-0.1	159	0.9	-0.3	0.8	213	3.7	2.0	3.1	260	13.9	13.7	2.5	258	17.3	16.9	3.7	260	22.4	22.1	3.9	238	9.4	8.0	5.0			
13	225	1.6	1.1	1.1	121	1.2	-1.0	0.6	213	4.4	2.4	3.7	250	12.5	11.8	4.2	260	22.2	21.9	3.9	252	26.1	24.8	8.1	159	10.9	-3.9	10.2			
14	166	0.8	-0.2	0.8	169	1.0	-0.2	1.0	225	4.1	2.9	2.9	253	11.7	11.2	3.5	257	23.6	23.0	5.4	248	32.1	29.8	11.8	238	9.7	8.3	5.1			
15	65	1.7	-1.5	-0.7	187	0.8	0.1	0.8	216	3.2	1.9	2.6	252	13.0	12.3	4.1	256	22.0	21.3	5.4	271	25.6	25.6	-0.3	255	10.6	10.3	2.7			
16	56	1.8	-1.5	-1.0	180	1.1	0.0	1.1	222	4.2	2.8	3.1	253	12.7	12.2	3.7	265	25.6	25.5	2.1	278	28.8	28.5	-4.1	258	15.3	14.9	3.3			
17	65	2.6	-2.4	-1.1	197	1.0	0.3	1.0	218	5.1	3.1	4.0	259	12.1	11.9	2.3	265	27.5	27.4	2.5	270	32.5	32.5	0.0	264	17.2	17.1	1.8			
18	82	1.5	-1.5	-0.2	198	1.6	0.5	1.5	235	4.7	3.8	2.7	260	11.3	11.1	2.0	266	27.4	27.3	2.0	280	30.6	30.1	-5.4	255	15.0	14.5	4.0			
19	76	1.2	-1.2	-0.3	207	1.8	0.8	1.6	227	5.4	3.9	3.7	252	12.6	12.0	4.0	265	23.6	23.5	2.2	259	25.7	25.2	4.9	252	8.4	8.0	2.6			
20	77	2.8	-2.7	-0.6	159	1.4	-0.5	1.3	223	6.2	4.2	4.5	255	13.5	13.0	3.5	270	27.6	27.6	-0.1	263	28.7	28.5	3.3	265	17.1	17.0	1.5			
21	76	1.2	-1.2	-0.3	214	1.1	0.6	0.9	211	6.0	3.1	5.1	254	18.3	17.6	5.0	265	29.7	29.6	2.5	262	37.9	37.5	5.3	293	23.0	21.2	-9.0			
22	77	1.8	-1.8	-0.4	187	0.8	0.1	0.8	234	4.8	3.9	2.8	256	14.6	14.2	3.6	263	30.8	30.6	3.7	264	32.8	32.6	3.2	249	11.6	10.8	4.2			
23	54	2.4	-1.9	-1.4	184	1.3	0.1	1.3	217	2.1	1.3	1.7	258	11.1	10.9	2.3	259	29.9	29.4	5.6	268	32.7	32.7	1.4	273	10.8	10.8	-0.6			
24	38	1.6	-1.0	-1.3	216	0.9	0.5	0.7	212	4.9	2.6	4.2	260	13.8	13.6	2.3	275	32.3	32.2	-2.6	275	38.2	38.1	-3.3	261	19.6	19.4	3.1			
25	360	0.1	0.0	-0.1	183	1.7	0.1	1.7	218	3.7	2.3	2.9	260	12.2	12.0	2.1	272	34.9	34.9	-1.4	277	42.9	42.6	-5.4	275	21.4	21.3	-1.8			
26	57	1.7	-1.4	-0.9	69	0.9	-0.8	-0.3	221	3.8	2.5	2.9	257	16.5	16.1	3.8	261	32.0	31.6	5.0	266	38.5	38.4	2.5	278	21.4	21.2	-3.1			
27	54	1.9	-1.5	-1.1	169	0.5	-0.1	0.5	218	3.6	2.2	2.8	261	13.2	13.0	2.1	264	28.1	28.0	2.7	272	44.0	44.0	-1.2	282	30.4	29.7	-6.5			
28	43	2.5	-1.7	-1.8	50	0.8	-0.6	-0.5	196	2.9	0.8	2.8	262	12.6	12.5	1.8	264	28.1	28.0	2.9	267	34.7	34.6	2.0	305	14.0	11.5	-8.0			
29	42	1.5	-1.0	-1.1	135	0.4	-0.3	0.3	207	3.5	1.6	3.1	258	14.3	14.0	3.0	264	31.2	31.0	3.5	261	30.2	29.9	4.5	—	—	—	—			
30	59	2.3	-2.0	-1.2	158	0.5	-0.2	0.5	225	4.2	3.0	3.0	257	16.5	16.1	3.8	266	26.7	26.6	2.0	259	33.9	33.3	6.3	273	15.8	15.8	-0.9			
31	45	1.1	-0.8	-0.8	103	0.9	-0.9	0.2	207	3.5	1.6	3.1	263	11.5	11.4	1.3	255	25.9	25.1	6.5	264	30.6	30.4	3.4	304	11.8	9.8	-6.6			

Daily Normals of Upper Air Winds (1971-2000)

263

MOHANBARI

NOVEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	52	1.1	-0.9	-0.7	108	0.9	-0.9	0.3	227	3.4	2.5	2.3	261	13.3	13.1	2.1	252	27.6	26.3	8.4	247	39.8	36.7	15.4	258	20.0	19.6	4.2			
2	52	1.8	-1.4	-1.1	162	0.9	-0.3	0.9	230	4.2	3.2	2.7	263	13.0	12.9	1.6	265	31.4	31.3	2.7	249	42.2	39.4	15.0	257	17.0	16.6	3.8			
3	43	2.1	-1.4	-1.5	167	0.9	-0.2	0.9	212	3.9	2.1	3.3	260	11.0	10.8	1.9	263	32.1	31.8	4.1	278	30.7	30.4	-4.3	281	21.5	21.1	-4.2			
4	65	1.7	-1.5	-0.7	164	0.7	-0.2	0.7	210	4.2	2.1	3.6	266	11.1	11.1	0.8	266	33.2	33.1	2.6	274	61.1	60.9	-4.3	264	27.0	26.9	2.8			
5	32	1.5	-0.8	-1.3	180	0.9	0.0	0.9	233	4.8	3.8	2.9	263	10.2	10.1	1.3	269	29.4	29.4	0.5	280	40.1	39.5	-6.8	258	19.9	19.5	4.0			
6	63	1.3	-1.2	-0.6	194	0.4	0.1	0.4	211	3.7	1.9	3.2	257	15.6	15.2	3.4	268	33.9	33.9	1.2	272	43.0	43.0	-1.2	282	24.0	23.5	-5.0			
7	50	0.8	-0.6	-0.5	225	0.7	0.5	0.5	202	3.5	1.3	3.3	262	11.9	11.8	1.7	270	35.7	35.7	0.2	275	41.9	41.7	-4.0	284	27.0	26.2	-6.5			
8	68	1.8	-1.7	-0.7	191	0.5	0.1	0.5	225	3.0	2.1	2.1	274	8.1	8.1	-0.5	269	37.5	37.5	0.5	276	44.0	43.7	-4.7	263	21.4	21.3	2.5			
9	48	2.4	-1.8	-1.6	72	1.6	-1.5	-0.5	212	3.1	1.6	2.6	250	14.8	13.9	5.0	259	44.2	43.4	8.2	264	45.3	45.0	5.1	259	25.8	25.3	5.1			
10	66	2.7	-2.5	-1.1	129	0.6	-0.5	0.4	199	3.9	1.3	3.7	268	13.9	13.9	0.6	253	33.1	31.6	9.8	268	38.8	38.8	1.1	292	22.6	21.0	-8.3			
11	77	2.3	-2.2	-0.5	104	1.2	-1.2	0.3	229	4.0	3.0	2.6	269	14.8	14.8	0.2	267	27.1	27.1	1.4	268	39.0	39.0	1.2	254	25.0	24.0	6.9			
12	45	1.7	-1.2	-1.2	108	0.9	-0.9	0.3	208	2.7	1.3	2.4	255	13.0	12.6	3.3	275	20.3	20.2	-1.9	269	35.2	35.2	0.5	276	23.0	22.9	-2.4			
13	45	1.7	-1.2	-1.2	135	1.0	-0.7	0.7	186	2.7	0.3	2.7	273	11.9	11.9	-0.7	274	27.0	26.9	-2.0	267	36.0	36.0	1.7	266	27.1	27.0	1.8			
14	45	2.4	-1.7	-1.7	135	0.7	-0.5	0.5	189	2.4	0.4	2.4	263	10.6	10.5	1.3	267	31.0	31.0	1.7	263	39.0	38.7	4.6	266	26.8	26.7	1.7			
15	38	1.6	-1.0	-1.3	135	0.8	-0.6	0.6	210	2.4	1.2	2.1	279	12.1	12.0	-1.8	277	34.6	34.3	-4.3	258	50.5	49.3	10.8	260	18.5	18.2	3.1			
16	45	2.4	-1.7	-1.7	126	1.4	-1.1	0.8	193	2.3	0.5	2.2	271	11.0	11.0	-0.1	271	31.2	31.2	-0.8	270	42.1	42.1	0.3	267	19.8	19.8	1.0			
17	50	2.6	-2.0	-1.7	84	0.9	-0.9	-0.1	189	2.4	0.4	2.4	263	13.7	13.6	1.7	268	27.4	27.4	0.8	266	42.2	42.1	3.2	259	12.7	12.5	2.4			
18	76	1.2	-1.2	-0.3	153	0.9	-0.4	0.8	191	4.3	0.8	4.2	263	14.5	14.4	1.7	271	30.7	30.7	-0.8	260	46.4	45.7	8.1	276	9.1	9.1	-0.9			
19	66	2.0	-1.8	-0.8	162	1.3	-0.4	1.2	219	4.6	2.9	3.6	259	19.9	19.5	3.9	264	32.9	32.7	3.7	253	41.4	39.6	12.0	206	9.0	3.9	8.1			
20	72	1.9	-1.8	-0.6	169	1.0	-0.2	1.0	223	5.9	4.0	4.3	265	16.7	16.6	1.4	258	35.8	35.1	7.2	254	45.6	43.9	12.4	276	16.0	15.9	-1.7			
21	61	1.8	-1.6	-0.9	124	0.7	-0.6	0.4	208	2.6	1.2	2.3	269	17.3	17.3	0.4	265	38.4	38.2	3.6	250	55.6	52.3	18.9	249	37.0	34.5	13.3			
22	58	1.9	-1.6	-1.0	95	1.1	-1.1	0.1	214	2.9	1.6	2.4	261	22.6	22.3	3.5	257	40.0	38.9	9.2	256	42.7	41.5	10.2	273	26.0	26.0	-1.4			
23	41	2.1	-1.4	-1.6	105	1.6	-1.5	0.4	215	4.2	2.4	3.4	255	23.4	22.6	6.1	264	36.1	35.9	4.0	262	37.3	36.9	5.3	—	—	—	—			
24	57	1.7	-1.4	-0.9	148	1.5	-0.8	1.3	218	6.1	3.7	4.8	259	21.4	21.0	4.1	262	42.6	42.2	5.7	259	43.9	43.1	8.3	291	26.0	24.3	-9.3			
25	55	1.9	-1.6	-1.1	137	1.6	-1.1	1.2	217	3.9	2.3	3.1	265	20.9	20.8	1.8	277	33.3	33.0	-4.2	280	39.4	38.8	-6.7	269	19.9	19.9	0.3			
26	45	2.1	-1.5	-1.5	123	1.7	-1.4	0.9	228	3.8	2.8	2.5	260	16.7	16.4	2.9	264	33.6	33.4	3.7	287	51.6	49.2	-15.4	260	19.8	19.5	3.4			
27	30	1.4	-0.7	-1.2	124	0.7	-0.6	0.4	215	3.8	2.2	3.1	268	19.9	19.9	0.8	274	36.2	36.1	-2.4	273	37.1	37.0	-2.1	282	23.5	23.0	-4.7			
28	55	1.6	-1.3	-0.9	187	0.8	0.1	0.8	236	3.6	3.0	2.0	261	15.5	15.3	2.5	279	38.7	38.2	-6.3	270	41.2	41.2	0.3	303	20.4	17.1	-11.2			
29	47	1.9	-1.4	-1.3	107	1.0	-1.0	0.3	225	3.5	2.5	2.5	263	20.2	20.0	2.6	267	44.0	43.9	2.5	255	45.5	43.9	12.0	268	14.2	14.2	0.5			
30	67	2.3	-2.1	-0.9	122	1.3	-1.1	0.7	199	2.8	0.9	2.6	259	17.0	16.7	3.2	261	33.8	33.4	5.5	259	39.6	38.9	7.5	253	23.9	22.9	7.0			

Daily Normals of Upper Air Winds (1971-2000)

MOHANBARI

DECEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	62	1.9	-1.7	-0.9	135	1.0	-0.7	0.7	219	3.6	2.3	2.8	261	19.4	19.2	3.0	258	39.7	38.8	8.5	248	39.8	37.0	14.7	284	19.9	19.3	-4.9
2	32	1.5	-0.8	-1.3	90	1.0	-1.0	0.0	216	1.4	0.8	1.1	269	14.7	14.7	0.3	289	27.7	26.2	-9.0	283	38.8	37.8	-8.8	265	17.7	17.6	1.6
3	49	2.1	-1.6	-1.4	101	1.0	-1.0	0.2	201	3.0	1.1	2.8	264	15.4	15.3	1.7	271	30.9	30.9	-0.6	262	40.8	40.4	6.0	270	24.2	24.2	0.2
4	71	1.8	-1.7	-0.6	103	1.3	-1.3	0.3	201	1.9	0.7	1.8	265	16.1	16.0	1.3	268	33.2	33.2	1.4	274	37.2	37.1	-2.3	271	34.6	34.6	-0.4
5	56	2.7	-2.2	-1.5	77	0.9	-0.9	-0.2	191	2.0	0.4	2.0	268	13.9	13.9	0.4	266	37.9	37.8	2.9	256	40.2	39.1	9.5	275	24.9	24.8	-2.1
6	65	1.4	-1.3	-0.6	84	1.0	-1.0	-0.1	165	1.1	-0.3	1.1	272	14.9	14.9	-0.6	273	34.3	34.3	-1.5	254	42.8	41.1	11.9	260	23.5	23.1	4.1
7	43	1.9	-1.3	-1.4	129	0.6	-0.5	0.4	235	2.1	1.7	1.2	267	15.9	15.9	0.9	272	29.5	29.5	-0.8	262	35.7	35.4	4.9	278	17.6	17.4	-2.5
8	38	1.1	-0.7	-0.9	163	1.0	-0.3	1.0	180	3.3	0.0	3.3	258	19.5	19.1	4.0	276	34.8	34.6	-3.8	265	42.9	42.7	3.6	266	39.7	39.6	3.1
9	47	1.6	-1.2	-1.1	77	0.9	-0.9	-0.2	205	1.7	0.7	1.5	272	18.0	18.0	-0.5	268	29.8	29.8	0.8	263	41.4	41.1	4.7	266	22.5	22.4	1.6
10	51	2.8	-2.2	-1.8	85	1.1	-1.1	-0.1	216	3.9	2.3	3.2	261	19.8	19.6	3.0	259	44.9	44.1	8.2	269	43.7	43.7	0.4	301	29.0	24.9	-14.9
11	49	2.1	-1.6	-1.4	98	1.5	-1.5	0.2	239	2.7	2.3	1.4	272	15.5	15.5	-0.6	271	36.5	36.5	-0.9	269	42.6	42.6	0.7	267	30.0	30.0	1.4
12	54	1.4	-1.1	-0.8	—	—	—	—	194	2.1	0.5	2.0	266	18.6	18.6	1.2	271	36.4	36.4	-0.5	261	40.3	39.8	6.2	269	25.5	25.5	0.6
13	20	2.7	-0.9	-2.5	77	0.9	-0.9	-0.2	180	2.2	0.0	2.2	271	16.0	16.0	-0.3	270	41.6	41.6	-0.1	271	51.1	51.1	-0.5	272	27.9	27.9	-0.8
14	56	2.2	-1.8	-1.2	90	1.0	-1.0	0.0	213	2.4	1.3	2.0	262	14.2	14.1	1.9	274	28.2	28.1	-2.1	262	59.0	58.4	8.2	—	—	—	—
15	38	2.4	-1.5	-1.9	84	0.9	-0.9	-0.1	215	4.5	2.6	3.7	267	16.4	16.4	0.9	271	34.8	34.8	-0.7	272	43.1	43.1	-1.7	267	43.2	43.2	1.9
16	49	2.3	-1.7	-1.5	207	0.4	0.2	0.4	180	2.7	0.0	2.7	274	17.9	17.8	-1.4	274	39.8	39.7	-2.7	270	58.3	58.3	-0.4	—	—	—	—
17	49	2.9	-2.2	-1.9	117	0.7	-0.6	0.3	211	2.3	1.2	2.0	271	18.0	18.0	-0.3	263	39.3	39.0	4.8	260	46.6	45.9	8.0	271	29.5	29.5	-0.4
18	39	1.9	-1.2	-1.5	70	1.5	-1.4	-0.5	201	1.7	0.6	1.6	272	14.3	14.3	-0.5	279	38.3	37.9	-5.7	275	53.7	53.5	-4.6	277	33.1	32.9	-4.0
19	45	2.4	-1.7	-1.7	170	1.1	-0.2	1.1	241	2.5	2.2	1.2	270	18.2	18.2	0.0	281	36.4	35.7	-7.1	264	56.0	55.7	5.6	259	33.2	32.6	6.1
20	57	1.7	-1.4	-0.9	129	0.6	-0.5	0.4	192	2.5	0.5	2.4	270	15.3	15.3	-0.1	270	38.3	38.3	-0.3	268	50.1	50.1	1.8	270	30.7	30.7	0.0
21	50	2.3	-1.8	-1.5	110	1.2	-1.1	0.4	252	3.3	3.1	1.0	267	16.6	16.6	0.8	265	40.9	40.7	3.5	257	51.3	49.9	11.7	263	16.2	16.1	1.9
22	45	1.6	-1.1	-1.1	67	0.8	-0.7	-0.3	205	2.3	1.0	2.1	276	16.6	16.5	-1.7	269	40.2	40.2	0.5	268	49.0	49.0	1.7	274	36.0	35.9	-2.5
23	34	0.4	-0.2	-0.3	121	1.2	-1.0	0.6	223	4.4	3.0	3.2	271	15.8	15.8	-0.3	274	43.4	43.3	-3.4	268	49.2	49.2	1.9	264	30.4	30.3	3.0
24	43	2.2	-1.5	-1.6	146	0.7	-0.4	0.6	209	3.1	1.5	2.7	275	15.2	15.2	-1.2	268	56.2	56.2	2.0	255	53.9	52.2	13.6	277	35.2	35.0	-4.0
25	18	1.3	-0.4	-1.2	124	0.7	-0.6	0.4	224	3.2	2.2	2.3	267	17.3	17.3	1.0	270	49.2	49.2	-0.3	253	53.1	50.8	15.6	266	15.5	15.5	1.1
26	58	1.9	-1.6	-1.0	95	2.1	-2.1	0.2	207	1.1	0.5	1.0	274	17.0	17.0	-1.2	274	44.5	44.4	-3.3	270	58.6	58.6	-0.2	277	24.0	23.8	-2.9
27	56	1.8	-1.5	-1.0	117	0.4	-0.4	0.2	224	3.2	2.2	2.3	276	19.2	19.1	-2.0	270	41.4	41.4	0.1	263	50.6	50.3	5.8	271	26.4	26.4	-0.3
28	56	2.2	-1.8	-1.2	83	0.8	-0.8	-0.1	221	4.3	2.8	3.2	268	25.7	25.7	1.1	266	44.8	44.7	3.3	260	58.2	57.3	10.4	277	38.7	38.4	-4.5
29	90	1.4	-1.4	0.0	130	0.8	-0.6	0.5	204	3.7	1.5	3.4	262	24.8	24.6	3.4	261	44.2	43.6	7.0	260	52.2	51.4	8.9	259	32.2	31.7	5.9
30	70	1.2	-1.1	-0.4	159	1.4	-0.5	1.3	222	5.1	3.4	3.8	269	19.6	19.6	0.3	262	49.8	49.4	6.6	254	61.4	59.1	16.6	275	24.0	23.9	-2.1
31	55	1.9	-1.6	-1.1	162	0.6	-0.2	0.6	216	4.9	2.9	4.0	267	18.1	18.1	1.1	268	40.5	40.5	1.1	267	52.2	52.1	2.6	263	33.1	32.9	3.8

Daily Normals of Upper Air Winds (1971-2000)

MUMBAI

JANUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	34	0.7	-0.4	-0.6	36	0.9	-0.5	-0.7	267	3.6	3.6	0.2	267	10.3	10.3	0.6	257	23.7	23.1	5.4	250	25.7	24.2	8.6	252	19.9	18.9	6.3
2	345	2.4	0.6	-2.3	76	0.8	-0.8	-0.2	296	2.5	2.3	-1.1	278	11.5	11.4	-1.6	264	23.3	23.2	2.4	258	25.7	25.1	5.5	262	17.3	17.1	2.3
3	11	2.1	-0.4	-2.1	127	2.1	-1.7	1.3	315	1.0	0.7	-0.7	267	9.6	9.6	0.5	260	23.2	22.9	4.0	256	26.7	25.9	6.4	261	16.0	15.8	2.5
4	357	2.1	0.1	-2.1	131	2.0	-1.5	1.3	235	1.6	1.3	0.9	272	13.3	13.3	-0.5	255	22.6	21.9	5.7	251	27.8	26.2	9.2	264	16.2	16.1	1.6
5	29	1.3	-0.6	-1.1	128	1.6	-1.3	1.0	260	2.3	2.3	0.4	267	12.0	12.0	0.6	256	24.2	23.5	5.7	251	26.6	25.2	8.5	251	12.4	11.7	4.0
6	284	1.2	1.2	-0.3	128	1.1	-0.9	0.7	261	1.9	1.9	0.3	270	12.9	12.9	0.0	261	24.1	23.8	3.9	263	28.0	27.8	3.3	269	16.0	16.0	0.4
7	6	1.0	-0.1	-1.0	150	0.8	-0.4	0.7	251	3.1	2.9	1.0	267	13.3	13.3	0.6	263	25.5	25.3	2.9	264	26.1	26.0	2.7	266	14.5	14.5	0.9
8	335	1.4	0.6	-1.3	141	0.6	-0.4	0.5	254	4.6	4.4	1.3	266	13.5	13.5	0.9	263	26.2	26.0	3.1	259	28.2	27.7	5.4	261	15.5	15.3	2.3
9	307	0.5	0.4	-0.3	159	1.9	-0.7	1.8	255	3.5	3.4	0.9	273	12.3	12.3	-0.6	266	22.8	22.7	1.7	263	25.4	25.2	3.1	272	12.6	12.6	-0.5
10	262	1.4	1.4	0.2	150	1.6	-0.8	1.4	260	2.8	2.8	0.5	268	13.0	13.0	0.4	262	24.8	24.6	3.4	252	27.2	25.9	8.3	270	11.7	11.7	0.0
11	328	1.5	0.8	-1.3	180	0.5	0.0	0.5	270	4.1	4.1	0.0	280	13.7	13.5	-2.4	264	26.4	26.3	2.7	257	26.7	26.0	6.0	261	14.5	14.3	2.2
12	321	2.2	1.4	-1.7	135	0.8	-0.6	0.6	269	4.2	4.2	0.1	276	13.5	13.4	-1.3	262	24.5	24.3	3.4	253	28.3	27.1	8.1	267	12.1	12.1	0.7
13	341	2.8	0.9	-2.6	171	1.2	-0.2	1.2	277	3.5	3.5	-0.4	267	13.0	13.0	0.6	268	26.5	26.5	0.7	258	28.6	28.0	5.7	269	15.6	15.6	0.3
14	285	2.0	1.9	-0.5	204	2.0	0.8	1.8	258	4.8	4.7	1.0	265	14.4	14.4	1.2	268	27.0	27.0	0.8	264	31.8	31.6	3.3	268	19.2	19.2	0.6
15	328	3.1	1.6	-2.6	231	1.3	1.0	0.8	250	4.0	3.8	1.4	271	13.9	13.9	-0.2	267	23.2	23.2	1.4	256	26.5	25.7	6.6	265	13.8	13.7	1.2
16	355	2.2	0.2	-2.2	157	1.3	-0.5	1.2	261	4.0	4.0	0.6	269	12.4	12.4	0.3	261	26.1	25.8	4.0	258	26.2	25.7	5.3	267	14.7	14.7	0.8
17	354	1.0	0.1	-1.0	140	1.6	-1.0	1.2	265	3.3	3.3	0.3	274	12.6	12.6	-0.8	260	24.7	24.3	4.3	264	26.0	25.9	2.5	265	15.6	15.5	1.3
18	329	2.6	1.3	-2.2	220	0.8	0.5	0.6	256	3.7	3.6	0.9	272	12.7	12.7	-0.5	266	25.7	25.6	2.0	262	25.5	25.2	3.6	261	13.9	13.7	2.2
19	320	3.5	2.3	-2.7	243	0.7	0.6	0.3	275	4.9	4.9	-0.4	271	12.6	12.6	-0.3	267	24.7	24.7	1.3	260	24.4	24.0	4.3	256	12.8	12.4	3.2
20	339	4.3	1.5	-4.0	243	0.4	0.4	0.2	276	5.1	5.1	-0.5	264	14.2	14.1	1.5	261	26.6	26.3	4.0	259	25.6	25.1	5.1	260	16.1	15.9	2.7
21	335	2.1	0.9	-1.9	253	1.0	1.0	0.3	279	5.4	5.3	-0.8	276	13.8	13.7	-1.4	261	24.6	24.3	3.7	253	24.7	23.6	7.4	257	15.2	14.8	3.4
22	312	2.4	1.8	-1.6	165	1.1	-0.3	1.1	281	4.2	4.1	-0.8	272	13.8	13.8	-0.5	262	25.4	25.2	3.5	254	28.4	27.2	8.0	266	15.4	15.4	1.1
23	351	2.6	0.4	-2.6	165	1.1	-0.3	1.1	278	2.9	2.9	-0.4	271	12.7	12.7	-0.2	264	24.6	24.5	2.7	255	26.9	26.0	6.8	269	16.5	16.5	0.2
24	5	2.1	-0.2	-2.1	175	1.1	-0.1	1.1	270	2.7	2.7	0.0	271	11.0	11.0	-0.2	271	22.9	22.9	-0.5	260	26.4	26.0	4.8	262	13.2	13.1	1.8
25	321	2.2	1.4	-1.7	175	1.2	-0.1	1.2	261	3.2	3.2	0.5	271	12.0	12.0	-0.3	267	23.5	23.5	1.4	261	24.7	24.4	4.0	260	15.5	15.3	2.7
26	298	2.1	1.9	-1.0	180	1.3	0.0	1.3	268	2.4	2.4	0.1	273	13.5	13.5	-0.8	266	24.1	24.0	1.6	261	27.8	27.4	4.5	256	16.1	15.6	3.8
27	330	2.2	1.1	-1.9	196	0.7	0.2	0.7	277	3.2	3.2	-0.4	273	14.3	14.3	-0.7	261	23.8	23.5	3.6	261	26.6	26.2	4.3	267	16.9	16.9	0.9
28	320	3.1	2.0	-2.4	112	0.5	-0.5	0.2	301	2.3	2.0	-1.2	280	12.2	12.0	-2.1	269	21.9	21.9	0.4	268	23.9	23.9	0.8	258	15.8	15.5	3.3
29	346	3.8	0.9	-3.7	342	0.3	0.1	-0.3	275	2.5	2.5	-0.2	281	11.5	11.3	-2.1	266	24.6	24.5	1.9	259	25.5	25.1	4.7	263	18.3	18.2	2.3
30	315	2.5	1.8	-1.8	215	1.2	0.7	1.0	262	4.2	4.2	0.6	276	12.8	12.7	-1.3	262	23.7	23.5	3.3	260	26.5	26.1	4.7	260	16.0	15.8	2.8
31	312	2.5	1.9	-1.7	229	0.9	0.7	0.6	268	5.1	5.1	0.2	277	13.6	13.5	-1.7	268	25.6	25.6	1.0	265	26.8	26.7	2.3	278	18.3	18.1	-2.5

Daily Normals of Upper Air Winds (1971-2000)

266

MUMBAI

FEBRUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	307	3.0	2.4	-1.8	223	1.9	1.3	1.4	278	5.0	5.0	-0.7	274	12.6	12.6	-0.8	265	26.9	26.8	2.5	268	26.7	26.7	0.9	268	14.6	14.6	0.5			
2	312	2.7	2.0	-1.8	225	1.6	1.1	1.1	274	5.6	5.6	-0.4	268	13.9	13.9	0.5	266	27.6	27.5	1.7	260	27.0	26.6	4.7	256	15.4	14.9	3.8			
3	333	2.9	1.3	-2.6	233	1.0	0.8	0.6	279	4.0	4.0	-0.6	273	13.5	13.5	-0.7	266	24.8	24.7	1.6	264	25.2	25.1	2.5	263	14.8	14.7	1.7			
4	325	3.5	2.0	-2.9	258	2.4	2.3	0.5	260	3.9	3.8	0.7	271	16.2	16.2	-0.4	272	29.8	29.8	-1.0	265	28.9	28.8	2.6	264	14.2	14.1	1.6			
5	315	2.7	1.9	-1.9	266	1.5	1.5	0.1	276	4.5	4.5	-0.5	279	14.0	13.8	-2.3	269	27.6	27.6	0.6	263	30.0	29.8	3.7	264	16.8	16.7	1.9			
6	312	3.0	2.2	-2.0	212	0.9	0.5	0.8	254	3.5	3.4	1.0	282	13.5	13.2	-2.7	270	26.2	26.2	0.2	267	27.4	27.4	1.6	263	12.4	12.3	1.5			
7	305	3.2	2.6	-1.8	193	0.9	0.2	0.9	268	3.4	3.4	0.1	284	12.7	12.3	-3.0	267	23.5	23.5	1.1	266	26.7	26.6	2.0	253	11.5	11.0	3.4			
8	325	4.9	2.8	-4.0	274	1.4	1.4	-0.1	286	3.5	3.4	-1.0	282	12.5	12.2	-2.5	270	24.1	24.1	-0.2	267	28.9	28.8	1.7	272	16.7	16.7	-0.6			
9	338	3.7	1.4	-3.4	292	0.5	0.5	-0.2	283	2.2	2.1	-0.5	286	13.2	12.7	-3.6	280	21.9	21.6	-3.8	269	25.4	25.4	0.4	266	15.9	15.9	1.2			
10	313	2.5	1.8	-1.7	189	0.6	0.1	0.6	235	3.2	2.6	1.8	281	11.4	11.2	-2.2	276	23.2	23.1	-2.6	265	24.7	24.6	2.2	271	11.5	11.5	-0.2			
11	342	2.2	0.7	-2.1	164	0.7	-0.2	0.7	236	2.7	2.2	1.5	272	12.5	12.5	-0.4	275	21.2	21.1	-2.0	264	25.4	25.3	2.6	259	15.1	14.8	3.0			
12	311	3.0	2.3	-2.0	219	0.6	0.4	0.5	216	3.1	1.8	2.5	270	12.9	12.9	0.0	265	26.0	25.9	2.3	255	27.1	26.2	7.1	261	17.5	17.3	2.7			
13	313	3.3	2.4	-2.2	238	1.5	1.3	0.8	237	4.5	3.8	2.5	263	13.7	13.6	1.7	260	27.0	26.6	4.6	252	28.3	26.9	8.9	255	14.6	14.1	3.8			
14	314	3.3	2.4	-2.3	253	1.4	1.3	0.4	235	5.1	4.2	2.9	266	14.8	14.8	1.0	265	26.3	26.2	2.2	257	29.1	28.3	6.7	259	12.8	12.6	2.5			
15	302	3.6	3.1	-1.9	248	1.6	1.5	0.6	232	4.7	3.7	2.9	268	15.1	15.1	0.4	267	25.1	25.1	1.2	259	27.9	27.4	5.3	257	17.1	16.7	3.9			
16	306	3.7	3.0	-2.2	250	2.3	2.2	0.8	240	5.0	4.3	2.5	264	15.1	15.0	1.7	261	25.3	25.0	4.0	251	28.8	27.2	9.4	256	17.3	16.8	4.2			
17	315	4.1	2.9	-2.9	214	1.4	0.8	1.2	246	4.8	4.4	2.0	267	15.1	15.1	0.9	257	28.1	27.4	6.3	248	28.3	26.2	10.6	258	15.2	14.9	3.1			
18	315	4.0	2.8	-2.8	265	1.2	1.2	0.1	244	5.8	5.2	2.5	274	14.7	14.7	-1.1	264	24.1	24.0	2.5	257	26.6	25.9	5.9	258	11.4	11.1	2.4			
19	302	3.4	2.9	-1.8	264	1.0	1.0	0.1	256	5.0	4.9	1.2	273	15.5	15.5	-0.8	263	26.3	26.1	3.0	255	26.3	25.4	6.9	262	14.5	14.4	1.9			
20	318	4.8	3.2	-3.6	300	1.4	1.2	-0.7	270	5.0	5.0	0.0	278	14.8	14.7	-2.0	261	25.6	25.3	4.0	256	27.0	26.2	6.4	267	16.0	16.0	0.7			
21	324	4.6	2.7	-3.7	256	1.2	1.2	0.3	270	3.2	3.2	0.0	277	13.9	13.8	-1.7	268	21.7	21.7	0.7	266	23.9	23.8	1.6	269	13.0	13.0	0.2			
22	332	3.2	1.5	-2.8	166	0.4	-0.1	0.4	261	3.0	3.0	0.5	278	12.0	11.9	-1.7	264	22.0	21.9	2.3	266	24.4	24.3	1.7	271	15.9	15.9	-0.4			
23	282	3.0	2.9	-0.6	240	1.6	1.4	0.8	245	3.3	3.0	1.4	277	12.3	12.2	-1.4	275	21.6	21.5	-1.7	269	25.0	25.0	0.4	268	13.5	13.5	0.5			
24	321	5.3	3.3	-4.1	288	0.9	0.9	-0.3	229	2.8	2.1	1.8	273	11.4	11.4	-0.5	268	20.2	20.2	0.6	264	22.5	22.4	2.5	257	13.6	13.2	3.1			
25	319	2.3	1.5	-1.7	247	2.1	1.9	0.8	246	3.2	2.9	1.3	272	11.7	11.7	-0.5	264	22.1	22.0	2.2	267	25.9	25.9	1.3	265	12.2	12.2	1.0			
26	326	4.0	2.2	-3.3	297	2.2	2.0	-1.0	256	3.7	3.6	0.9	277	12.4	12.3	-1.6	266	23.1	23.0	1.7	271	25.2	25.2	-0.5	271	15.6	15.6	-0.3			
27	326	5.0	2.8	-4.1	276	1.8	1.8	-0.2	245	4.0	3.6	1.7	281	12.0	11.8	-2.3	263	24.4	24.2	2.9	267	25.6	25.6	1.5	269	14.7	14.7	0.3			
28	333	5.5	2.5	-4.9	261	1.9	1.9	0.3	242	2.6	2.3	1.2	275	10.6	10.6	-1.0	269	24.4	24.4	0.4	267	24.0	24.0	1.2	274	16.3	16.3	-1.0			
29	305	3.2	2.6	-1.8	333	0.2	0.1	-0.2	254	2.5	2.4	0.7	260	9.5	9.4	1.6	260	24.8	24.4	4.3	246	27.8	25.4	11.3	247	18.9	17.4	7.5			

Daily Normals of Upper Air Winds (1971-2000)

267

MUMBAI

MARCH

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	320	4.2	2.7	-3.2	317	1.6	1.1	-1.2	258	3.0	2.9	0.6	273	10.7	10.7	-0.5	269	24.6	24.6	0.6	259	27.7	27.2	5.3	260	15.5	15.3	2.7			
2	316	3.9	2.7	-2.8	338	0.5	0.2	-0.5	234	1.7	1.4	1.0	276	10.5	10.4	-1.1	275	21.4	21.3	-1.8	267	26.3	26.3	1.4	264	10.7	10.6	1.2			
3	310	2.3	1.8	-1.5	27	0.2	-0.1	-0.2	200	2.3	0.8	2.2	284	10.1	9.8	-2.5	272	21.8	21.8	-0.7	259	25.0	24.5	4.8	258	12.6	12.3	2.7			
4	293	3.9	3.6	-1.5	294	1.2	1.1	-0.5	224	2.8	1.9	2.0	273	10.7	10.7	-0.6	266	20.4	20.4	1.4	260	22.7	22.4	3.8	271	11.9	11.9	-0.2			
5	325	5.9	3.4	-4.8	290	2.3	2.2	-0.8	231	3.2	2.5	2.0	269	10.3	10.3	0.2	263	21.7	21.5	2.8	260	22.9	22.5	4.0	260	13.3	13.1	2.2			
6	312	4.6	3.4	-3.1	284	3.4	3.3	-0.8	218	4.1	2.5	3.2	272	10.4	10.4	-0.3	264	21.8	21.7	2.2	262	23.5	23.3	3.4	273	14.4	14.4	-0.8			
7	312	4.7	3.5	-3.2	260	1.1	1.1	0.2	221	2.3	1.5	1.7	267	9.0	9.0	0.4	264	21.7	21.6	2.4	263	23.9	23.7	3.0	265	10.8	10.8	0.9			
8	314	4.3	3.1	-3.0	281	2.1	2.1	-0.4	214	2.2	1.2	1.8	271	8.8	8.8	-0.1	265	23.7	23.6	2.2	263	26.0	25.8	3.3	257	15.2	14.8	3.4			
9	305	3.2	2.6	-1.8	293	1.3	1.2	-0.5	212	3.2	1.7	2.7	263	9.7	9.6	1.2	260	23.6	23.3	3.9	261	24.7	24.4	3.8	257	16.1	15.7	3.6			
10	313	3.5	2.6	-2.4	262	2.2	2.2	0.3	219	4.8	3.0	3.7	255	10.1	9.8	2.6	266	22.7	22.7	1.4	265	25.2	25.1	2.2	266	14.5	14.5	1.0			
11	317	4.0	2.7	-2.9	303	2.4	2.0	-1.3	225	4.2	3.0	3.0	265	11.0	11.0	0.9	262	24.7	24.5	3.3	260	28.2	27.7	5.1	256	15.7	15.3	3.7			
12	309	3.5	2.7	-2.2	318	1.3	0.9	-1.0	229	4.3	3.2	2.8	278	11.4	11.3	-1.6	267	23.2	23.2	1.1	262	24.3	24.1	3.3	266	15.5	15.5	1.0			
13	308	4.1	3.2	-2.5	286	1.9	1.8	-0.5	205	3.8	1.6	3.4	275	9.9	9.9	-0.8	274	22.7	22.7	-1.4	268	27.7	27.7	0.8	269	15.7	15.7	0.3			
14	332	5.1	2.4	-4.5	335	1.4	0.6	-1.3	212	2.6	1.4	2.2	280	8.3	8.2	-1.4	272	19.2	19.2	-0.6	266	23.1	23.0	1.7	266	15.5	15.5	1.0			
15	290	3.7	3.5	-1.3	262	2.1	2.1	0.3	210	3.0	1.5	2.6	267	7.7	7.7	0.4	265	18.4	18.3	1.5	262	23.5	23.3	3.1	262	14.0	13.9	1.9			
16	314	4.3	3.1	-3.0	286	1.8	1.7	-0.5	203	3.4	1.3	3.1	265	8.5	8.5	0.7	260	19.8	19.5	3.4	253	23.2	22.2	6.7	245	11.1	10.1	4.7			
17	316	3.5	2.4	-2.5	297	2.5	2.2	-1.1	205	5.0	2.1	4.5	271	10.0	10.0	-0.1	268	21.0	21.0	0.6	256	26.3	25.6	6.2	263	13.0	12.9	1.5			
18	342	4.9	1.5	-4.7	308	2.3	1.8	-1.4	209	4.6	2.2	4.0	276	10.1	10.0	-1.1	262	18.3	18.1	2.5	253	23.1	22.1	6.8	253	11.5	11.0	3.4			
19	326	4.3	2.4	-3.6	285	2.3	2.2	-0.6	211	3.7	1.9	3.2	274	10.5	10.5	-0.8	261	20.2	19.9	3.2	259	23.0	22.6	4.5	259	13.5	13.2	2.6			
20	337	5.3	2.1	-4.9	305	3.3	2.7	-1.9	217	4.4	2.6	3.5	273	8.5	8.5	-0.4	268	19.5	19.5	0.8	265	20.7	20.6	1.8	273	11.9	11.9	-0.7			
21	331	7.7	3.7	-6.7	317	3.3	2.2	-2.4	231	4.9	3.8	3.1	275	9.6	9.6	-0.9	269	20.6	20.6	0.3	262	22.3	22.1	3.3	279	10.3	10.2	-1.6			
22	324	5.6	3.3	-4.5	312	2.5	1.9	-1.7	229	4.5	3.4	3.0	282	7.3	7.1	-1.5	273	18.7	18.7	-1.0	269	21.1	21.1	0.2	263	12.0	11.9	1.4			
23	322	4.2	2.6	-3.3	297	2.2	2.0	-1.0	221	3.3	2.2	2.5	275	7.0	7.0	-0.6	272	18.9	18.9	-0.6	267	20.5	20.5	1.2	269	11.3	11.3	0.1			
24	334	5.7	2.5	-5.1	310	3.4	2.6	-2.2	238	3.6	3.1	1.9	279	8.6	8.5	-1.4	280	19.4	19.1	-3.5	261	24.9	24.6	4.0	267	12.6	12.6	0.7			
25	324	6.0	3.5	-4.9	306	1.9	1.5	-1.1	236	2.7	2.2	1.5	279	8.0	7.9	-1.2	278	18.4	18.2	-2.7	265	25.9	25.8	2.2	258	11.0	10.8	2.3			
26	328	5.1	2.7	-4.3	315	1.3	0.9	-0.9	255	1.6	1.5	0.4	301	7.4	6.4	-3.8	285	17.7	17.1	-4.5	270	21.9	21.9	-0.1	273	9.0	9.0	-0.5			
27	313	4.9	3.6	-3.3	332	1.5	0.7	-1.3	160	1.2	-0.4	1.1	290	5.2	4.9	-1.8	280	16.8	16.5	-2.9	269	19.5	19.5	0.4	258	7.8	7.6	1.6			
28	312	4.3	3.2	-2.9	330	1.4	0.7	-1.2	133	1.6	-1.2	1.1	290	6.8	6.4	-2.3	280	18.5	18.2	-3.1	267	21.8	21.8	1.3	231	5.9	4.6	3.7			
29	320	5.3	3.4	-4.1	317	1.9	1.3	-1.4	165	2.3	-0.6	2.2	284	5.4	5.2	-1.3	269	17.3	17.3	0.4	264	20.8	20.7	2.3	265	9.5	9.5	0.8			
30	319	4.8	3.1	-3.6	299	2.9	2.5	-1.4	219	2.8	1.8	2.2	271	6.3	6.3	-0.1	262	18.9	18.7	2.6	254	22.7	21.9	6.1	247	10.5	9.7	4.1			
31	328	4.7	2.5	-4.0	308	3.4	2.7	-2.1	226	3.5	2.5	2.4	272	6.8	6.8	-0.2	267	18.6	18.6	1.0	260	20.0	19.7	3.6	260	6.2	6.1	1.1			

Daily Normals of Upper Air Winds (1971-2000)

268

MUMBAI

APRIL

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	318	6.4	4.3	-4.8	302	2.6	2.2	-1.4	207	3.6	1.6	3.2	260	6.0	5.9	1.0	260	19.8	19.5	3.4	255	22.1	21.4	5.6	261	9.3	9.2	1.4			
2	320	5.2	3.3	-4.0	315	3.4	2.4	-2.4	201	3.9	1.4	3.6	260	6.6	6.5	1.2	260	19.1	18.8	3.4	257	20.4	19.8	4.7	267	10.5	10.5	0.6			
3	310	4.5	3.5	-2.9	301	2.7	2.3	-1.4	196	4.8	1.3	4.6	261	6.0	5.9	0.9	264	19.5	19.4	2.2	262	22.0	21.8	3.1	250	5.9	5.5	2.0			
4	320	4.8	3.1	-3.7	315	2.4	1.7	-1.7	206	3.2	1.4	2.9	267	7.7	7.7	0.4	265	19.9	19.8	1.9	264	23.4	23.3	2.6	260	9.9	9.8	1.7			
5	320	4.5	2.9	-3.5	312	1.3	1.0	-0.9	207	3.9	1.8	3.5	271	6.2	6.2	-0.1	268	19.4	19.4	0.8	255	21.9	21.2	5.5	241	9.8	8.6	4.8			
6	319	3.7	2.4	-2.8	310	2.5	1.9	-1.6	199	3.1	1.0	2.9	270	4.7	4.7	0.0	264	17.0	16.9	1.9	262	19.6	19.4	2.8	248	7.6	7.1	2.8			
7	333	6.0	2.7	-5.4	302	3.1	2.6	-1.6	223	3.4	2.3	2.5	273	6.5	6.5	-0.3	264	17.8	17.7	1.9	254	20.5	19.8	5.5	264	7.9	7.9	0.8			
8	319	5.7	3.7	-4.3	325	3.9	2.2	-3.2	203	4.0	1.6	3.7	273	6.2	6.2	-0.3	266	18.2	18.2	1.2	251	21.4	20.3	6.8	247	9.5	8.8	3.7			
9	309	4.9	3.8	-3.1	315	3.5	2.5	-2.5	223	4.2	2.9	3.1	277	5.9	5.9	-0.7	269	18.9	18.9	0.4	261	22.8	22.5	3.4	265	8.4	8.4	0.8			
10	317	5.2	3.5	-3.8	303	3.8	3.2	-2.1	219	4.3	2.7	3.3	273	5.3	5.3	-0.3	278	15.9	15.8	-2.1	267	21.5	21.5	1.1	268	10.2	10.2	0.3			
11	314	4.2	3.0	-2.9	310	3.1	2.4	-2.0	215	2.9	1.7	2.4	272	4.7	4.7	-0.2	271	15.7	15.7	-0.2	266	19.2	19.2	1.3	262	7.5	7.4	1.1			
12	313	4.4	3.2	-3.0	344	3.3	0.9	-3.2	190	1.7	0.3	1.7	277	4.2	4.2	-0.5	265	15.6	15.5	1.4	259	20.0	19.6	3.8	246	8.2	7.5	3.4			
13	309	5.1	4.0	-3.2	346	3.2	0.8	-3.1	209	2.3	1.1	2.0	256	6.3	6.1	1.5	265	16.1	16.0	1.5	255	19.3	18.7	4.9	245	10.3	9.3	4.4			
14	310	5.2	4.0	-3.4	310	3.3	2.5	-2.1	204	3.4	1.4	3.1	262	6.9	6.8	0.9	260	17.5	17.2	3.1	255	22.7	21.9	6.0	257	8.9	8.7	2.0			
15	330	5.3	2.7	-4.6	315	3.5	2.5	-2.5	212	3.9	2.1	3.3	276	5.7	5.7	-0.6	262	15.2	15.1	2.1	254	22.5	21.7	6.1	255	7.5	7.3	1.9			
16	320	5.6	3.6	-4.3	317	3.3	2.2	-2.4	215	3.8	2.2	3.1	282	4.5	4.4	-0.9	274	15.3	15.3	-1.2	255	22.6	21.8	5.9	258	8.1	7.9	1.7			
17	317	5.3	3.6	-3.9	316	3.0	2.1	-2.2	219	3.5	2.2	2.7	270	4.8	4.8	0.0	271	15.1	15.1	-0.3	266	20.1	20.1	1.4	273	8.8	8.8	-0.5			
18	320	4.7	3.0	-3.6	319	3.7	2.4	-2.8	212	3.1	1.6	2.6	290	3.8	3.6	-1.3	265	14.1	14.0	1.2	260	19.5	19.2	3.5	270	6.1	6.1	0.0			
19	318	5.7	3.8	-4.2	317	4.0	2.7	-2.9	207	2.5	1.1	2.2	280	4.2	4.1	-0.7	256	13.5	13.1	3.3	244	17.8	16.0	7.8	259	4.9	4.8	0.9			
20	327	5.5	3.0	-4.6	339	3.3	1.2	-3.1	207	2.2	1.0	2.0	264	4.1	4.1	0.4	255	13.9	13.4	3.6	250	19.0	17.9	6.5	251	5.6	5.3	1.8			
21	332	7.6	3.6	-6.7	336	3.5	1.4	-3.2	222	2.7	1.8	2.0	279	3.6	3.6	-0.6	254	14.9	14.4	4.0	250	20.9	19.7	7.0	254	6.5	6.2	1.8			
22	324	5.7	3.3	-4.6	351	2.6	0.4	-2.6	195	2.7	0.7	2.6	270	4.0	4.0	0.0	263	15.3	15.2	1.8	259	18.9	18.6	3.5	260	6.3	6.2	1.1			
23	325	6.5	3.7	-5.3	325	2.8	1.6	-2.3	209	3.3	1.6	2.9	281	3.8	3.7	-0.7	262	13.0	12.9	1.7	253	17.0	16.3	5.0	276	4.0	4.0	-0.4			
24	321	5.8	3.7	-4.5	327	2.7	1.5	-2.3	213	3.1	1.7	2.6	283	3.9	3.8	-0.9	268	16.0	16.0	0.6	252	19.6	18.7	6.0	272	4.7	4.7	-0.2			
25	318	7.0	4.7	-5.2	322	3.1	1.9	-2.4	194	1.6	0.4	1.6	306	3.9	3.2	-2.3	281	14.6	14.3	-2.8	280	15.6	15.4	-2.6	280	2.3	2.3	-0.4			
26	323	5.9	3.5	-4.7	328	3.6	1.9	-3.1	200	2.7	0.9	2.5	307	3.1	2.5	-1.9	279	13.7	13.5	-2.2	259	12.6	12.4	2.3	180	0.8	0.0	0.8			
27	320	6.4	4.1	-4.9	330	3.9	2.0	-3.4	185	2.1	0.2	2.1	306	2.9	2.3	-1.7	266	10.5	10.5	0.8	258	13.0	12.7	2.8	105	1.1	-1.1	0.3			
28	317	6.7	4.6	-4.9	322	4.1	2.5	-3.2	217	1.5	0.9	1.2	306	3.2	2.6	-1.9	269	12.3	12.3	0.2	255	16.3	15.8	4.2	208	1.7	0.8	1.5			
29	318	5.5	3.7	-4.1	323	4.5	2.7	-3.6	212	1.9	1.0	1.6	312	2.8	2.1	-1.9	272	12.5	12.5	-0.4	256	14.7	14.3	3.5	193	1.3	0.3	1.3			
30	323	6.4	3.9	-5.1	313	4.2	3.1	-2.9	217	3.5	2.1	2.8	291	3.0	2.8	-1.1	264	13.0	12.9	1.3	260	16.0	15.8	2.7	281	1.6	1.6	-0.3			

Daily Normals of Upper Air Winds (1971-2000)

MUMBAI

MAY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	301	5.6	4.8	-2.9	312	4.3	3.2	-2.9	225	2.5	1.8	1.8	281	3.3	3.2	-0.6	266	14.3	14.3	0.9	260	16.2	15.9	2.9	276	1.9	1.9	-0.2
2	313	5.4	4.0	-3.7	328	3.4	1.8	-2.9	255	1.1	1.1	0.3	280	3.5	3.4	-0.6	265	14.0	13.9	1.3	254	17.3	16.6	4.9	217	4.3	2.6	3.4
3	316	7.1	5.0	-5.1	326	3.2	1.8	-2.7	205	1.4	0.6	1.3	279	1.8	1.8	-0.3	260	11.4	11.2	2.0	246	14.9	13.6	6.0	113	1.5	-1.4	0.6
4	317	4.7	3.2	-3.4	333	3.3	1.5	-2.9	203	1.5	0.6	1.4	305	2.1	1.7	-1.2	262	11.3	11.2	1.5	252	13.6	13.0	4.1	135	2.3	-1.6	1.6
5	333	7.2	3.2	-6.4	339	4.0	1.4	-3.7	150	1.4	-0.7	1.2	321	2.1	1.3	-1.6	259	11.5	11.3	2.2	249	15.6	14.5	5.7	148	3.6	-1.9	3.0
6	329	7.6	3.9	-6.5	332	4.1	1.9	-3.6	175	1.1	-0.1	1.1	335	1.7	0.7	-1.5	251	9.7	9.2	3.1	238	11.8	10.0	6.2	186	3.8	0.4	3.8
7	311	5.6	4.2	-3.7	328	3.9	2.1	-3.3	203	1.3	0.5	1.2	297	2.2	2.0	-1.0	266	9.3	9.3	0.6	249	10.8	10.1	3.8	162	1.9	-0.6	1.8
8	288	4.5	4.3	-1.4	326	4.5	2.5	-3.7	256	1.2	1.2	0.3	322	1.6	1.0	-1.3	273	8.3	8.3	-0.4	260	9.4	9.2	1.7	194	1.2	0.3	1.2
9	296	4.9	4.4	-2.1	319	4.9	3.2	-3.7	270	2.1	2.1	0.0	328	1.9	1.0	-1.6	274	8.4	8.4	-0.6	255	8.8	8.5	2.2	146	2.3	-1.3	1.9
10	309	5.8	4.5	-3.6	316	4.7	3.3	-3.4	283	3.6	3.5	-0.8	311	4.4	3.3	-2.9	271	11.1	11.1	-0.1	253	10.5	10.0	3.1	103	3.9	-3.8	0.9
11	307	5.8	4.6	-3.5	323	4.4	2.6	-3.5	302	2.5	2.1	-1.3	349	3.6	0.7	-3.5	274	9.5	9.5	-0.7	257	8.3	8.1	1.9	134	3.0	-2.2	2.1
12	306	4.6	3.7	-2.7	324	4.2	2.5	-3.4	304	2.2	1.8	-1.2	18	3.8	-1.2	-3.6	276	6.2	6.2	-0.6	242	8.6	7.6	4.1	107	2.7	-2.6	0.8
13	314	8.1	5.8	-5.6	336	4.8	2.0	-4.4	310	1.7	1.3	-1.1	13	2.8	-0.6	-2.7	254	6.0	5.8	1.7	238	5.2	4.4	2.8	117	5.5	-4.9	2.5
14	300	5.2	4.5	-2.6	321	4.8	3.0	-3.7	278	1.5	1.5	-0.2	16	3.7	-1.0	-3.6	260	4.2	4.1	0.7	244	6.4	5.8	2.8	135	5.4	-3.8	3.8
15	288	4.7	4.5	-1.5	311	4.3	3.2	-2.8	259	1.6	1.6	0.3	13	1.7	-0.4	-1.7	254	5.0	4.8	1.4	250	6.1	5.7	2.1	120	5.6	-4.9	2.8
16	291	5.8	5.4	-2.1	317	3.8	2.6	-2.8	251	1.8	1.7	0.6	14	1.2	-0.3	-1.2	253	5.9	5.7	1.7	216	6.9	4.1	5.6	129	4.1	-3.2	2.6
17	281	4.9	4.8	-0.9	320	3.5	2.3	-2.7	264	1.9	1.9	0.2	351	1.8	0.3	-1.8	266	5.6	5.6	0.4	229	6.5	4.9	4.3	124	4.3	-3.6	2.4
18	270	5.8	5.8	0.0	298	4.5	4.0	-2.1	272	2.8	2.8	-0.1	2	2.9	-0.1	-2.9	271	5.6	5.6	-0.1	255	5.4	5.2	1.4	102	6.0	-5.9	1.3
19	264	5.3	5.3	0.6	285	3.9	3.8	-1.0	261	2.6	2.6	0.4	343	3.1	0.9	-3.0	285	4.2	4.1	-1.1	238	6.0	5.1	3.2	99	9.1	-9.0	1.5
20	277	6.1	6.1	-0.7	306	3.7	3.0	-2.2	307	2.6	2.1	-1.6	6	2.8	-0.3	-2.8	285	3.1	3.0	-0.8	225	4.9	3.5	3.5	99	5.2	-5.1	0.8
21	285	5.0	4.8	-1.3	307	3.8	3.0	-2.3	298	1.7	1.5	-0.8	357	2.0	0.1	-2.0	281	2.0	2.0	-0.4	227	4.1	3.0	2.8	96	8.5	-8.5	0.9
22	283	5.7	5.5	-1.3	311	3.7	2.8	-2.4	315	0.8	0.6	-0.6	27	2.2	-1.0	-2.0	266	4.4	4.4	0.3	225	6.4	4.5	4.5	94	8.7	-8.7	0.6
23	289	5.2	4.9	-1.7	306	3.9	3.2	-2.3	292	1.1	1.0	-0.4	22	2.9	-1.1	-2.7	293	2.8	2.6	-1.1	234	3.9	3.2	2.3	98	8.8	-8.7	1.2
24	282	5.1	5.0	-1.1	296	3.7	3.3	-1.6	323	1.0	0.6	-0.8	39	3.3	-2.1	-2.6	270	2.4	2.4	0.0	210	3.6	1.8	3.1	111	8.5	-7.9	3.0
25	285	4.9	4.7	-1.3	298	4.1	3.6	-1.9	353	1.7	0.2	-1.7	39	4.3	-2.7	-3.3	352	2.7	0.4	-2.7	219	1.9	1.2	1.5	100	11.0	-10.8	1.9
26	283	5.4	5.3	-1.2	306	3.9	3.2	-2.3	324	1.4	0.8	-1.1	46	4.2	-3.0	-2.9	270	0.7	0.7	0.0	201	2.5	0.9	2.3	103	11.6	-11.3	2.7
27	275	5.4	5.4	-0.5	301	4.8	4.1	-2.5	294	1.2	1.1	-0.5	44	3.5	-2.4	-2.5	270	0.9	0.9	0.0	194	1.2	0.3	1.2	108	10.8	-10.3	3.4
28	267	5.0	5.0	0.3	295	4.1	3.7	-1.7	335	1.9	0.8	-1.7	38	1.8	-1.1	-1.4	207	0.4	0.2	0.4	185	3.3	0.3	3.3	107	12.7	-12.1	3.8
29	276	5.5	5.5	-0.6	301	3.1	2.7	-1.6	304	0.7	0.6	-0.4	27	1.3	-0.6	-1.2	273	2.1	2.1	-0.1	211	2.3	1.2	2.0	93	10.2	-10.2	0.6
30	274	5.7	5.7	-0.4	286	3.2	3.1	-0.9	300	0.8	0.7	-0.4	34	0.4	-0.2	-0.3	240	2.0	1.7	1.0	195	2.7	0.7	2.6	102	13.7	-13.4	2.9
31	281	5.3	5.2	-1.0	277	1.7	1.7	-0.2	180	0.5	0.0	0.5	98	1.4	-1.4	0.2	246	1.2	1.1	0.5	167	4.0	-0.9	3.9	96	11.7	-11.6	1.3

Daily Normals of Upper Air Winds (1971-2000)

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MUMBAI

JUNE

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	304	6.1	5.1	-3.4	305	3.2	2.6	-1.8	324	1.4	0.8	-1.1	270	0.6	0.6	0.0	196	2.5	0.7	2.4	125	3.3	-2.7	1.9	108	15.9	-15.1	4.9			
2	287	5.0	4.8	-1.5	285	2.7	2.6	-0.7	360	0.6	0.0	-0.6	332	1.5	0.7	-1.3	239	1.7	1.5	0.9	140	2.3	-1.5	1.8	100	15.1	-14.9	2.6			
3	298	5.0	4.4	-2.3	283	2.6	2.5	-0.6	32	0.9	-0.5	-0.8	49	2.1	-1.6	-1.4	145	2.1	-1.2	1.7	121	4.5	-3.9	2.3	103	14.6	-14.2	3.4			
4	293	4.9	4.5	-1.9	274	3.1	3.1	-0.2	324	0.9	0.5	-0.7	39	1.4	-0.9	-1.1	90	1.8	-1.8	0.0	126	3.6	-2.9	2.1	98	16.6	-16.4	2.4			
5	306	1.9	1.5	-1.1	249	1.7	1.6	0.6	45	1.6	-1.1	-1.1	58	1.9	-1.6	-1.0	110	1.5	-1.4	0.5	120	5.8	-5.0	2.9	99	16.9	-16.7	2.5			
6	277	3.1	3.1	-0.4	235	2.8	2.3	1.6	112	1.1	-1.0	0.4	67	1.3	-1.2	-0.5	125	1.6	-1.3	0.9	111	6.6	-6.1	2.4	100	17.2	-16.9	3.1			
7	238	5.5	4.7	2.9	232	4.1	3.2	2.5	117	0.7	-0.6	0.3	85	2.3	-2.3	-0.2	127	2.6	-2.1	1.6	121	7.9	-6.8	4.1	100	17.2	-17.0	2.9			
8	262	5.2	5.2	0.7	236	4.5	3.7	2.5	270	1.9	1.9	0.0	106	1.5	-1.4	0.4	116	3.0	-2.7	1.3	103	5.0	-4.9	1.1	92	17.3	-17.3	0.5			
9	272	6.6	6.6	-0.2	233	5.4	4.3	3.2	248	1.6	1.5	0.6	81	2.0	-2.0	-0.3	90	4.2	-4.2	0.0	84	6.8	-6.8	-0.7	90	19.2	-19.2	0.0			
10	266	5.1	5.1	0.4	228	5.2	3.9	3.5	262	0.7	0.7	0.1	57	2.0	-1.7	-1.1	89	4.3	-4.3	-0.1	94	9.0	-9.0	0.6	89	18.6	-18.6	-0.2			
11	277	6.8	6.8	-0.8	251	6.0	5.7	2.0	247	1.5	1.4	0.6	144	0.9	-0.5	0.7	103	3.6	-3.5	0.8	89	9.9	-9.9	-0.2	84	21.7	-21.6	-2.1			
12	264	5.8	5.8	0.6	252	5.1	4.8	1.6	307	0.5	0.4	-0.3	120	0.8	-0.7	0.4	99	4.4	-4.3	0.7	93	9.4	-9.4	0.5	89	21.9	-21.9	-0.4			
13	278	5.3	5.3	-0.7	255	5.4	5.2	1.4	240	0.8	0.7	0.4	143	0.5	-0.3	0.4	97	5.0	-5.0	0.6	89	11.5	-11.5	-0.2	88	22.4	-22.4	-0.8			
14	259	6.7	6.6	1.3	246	5.5	5.0	2.2	259	1.5	1.5	0.3	170	1.1	-0.2	1.1	87	5.9	-5.9	-0.3	91	11.7	-11.7	0.2	89	22.7	-22.7	-0.5			
15	251	6.0	5.7	2.0	248	6.1	5.6	2.3	247	1.5	1.4	0.6	113	1.3	-1.2	0.5	88	5.7	-5.7	-0.2	88	11.2	-11.2	-0.3	90	23.5	-23.5	-0.1			
16	243	7.1	6.3	3.2	254	6.1	5.9	1.7	262	2.8	2.8	0.4	184	1.6	0.1	1.6	93	5.8	-5.8	0.3	88	11.5	-11.5	-0.5	87	24.4	-24.4	-1.4			
17	239	6.1	5.2	3.1	246	6.2	5.7	2.5	289	3.4	3.2	-1.1	360	0.4	0.0	-0.4	84	6.0	-6.0	-0.6	80	11.8	-11.6	-2.1	86	24.1	-24.1	-1.5			
18	247	7.9	7.3	3.1	238	8.6	7.3	4.6	266	5.1	5.1	0.4	257	1.3	1.3	0.3	94	5.6	-5.6	0.4	93	12.3	-12.3	0.6	86	22.7	-22.7	-1.4			
19	253	8.9	8.5	2.6	246	8.7	7.9	3.6	280	4.6	4.5	-0.8	234	2.2	1.8	1.3	76	5.0	-4.9	-1.2	84	13.5	-13.4	-1.4	89	25.0	-25.0	-0.6			
20	251	9.6	9.1	3.1	250	8.8	8.3	3.0	265	6.4	6.4	0.6	241	1.8	1.6	0.9	98	5.8	-5.7	0.8	88	13.0	-13.0	-0.4	86	26.9	-26.8	-2.1			
21	250	8.6	8.1	3.0	251	8.7	8.2	2.8	265	6.2	6.2	0.5	211	0.6	0.3	0.5	85	8.1	-8.1	-0.7	91	20.0	-20.0	0.4	86	26.3	-26.2	-1.7			
22	256	9.8	9.5	2.4	254	8.5	8.2	2.4	255	5.1	4.9	1.3	228	2.4	1.8	1.6	79	7.1	-7.0	-1.3	81	15.2	-15.0	-2.5	90	26.6	-26.6	0.2			
23	251	9.1	8.6	2.9	249	8.4	7.8	3.0	258	5.0	4.9	1.0	218	1.6	1.0	1.3	81	7.6	-7.5	-1.2	85	15.0	-14.9	-1.4	83	25.9	-25.7	-3.0			
24	258	10.2	10.0	2.1	250	8.4	7.9	2.8	261	7.0	6.9	1.1	232	1.6	1.3	1.0	86	6.4	-6.4	-0.4	86	14.8	-14.8	-1.0	92	26.3	-26.3	0.7			
25	260	8.9	8.8	1.5	252	9.2	8.7	2.9	260	5.7	5.6	1.0	229	0.9	0.7	0.6	83	6.2	-6.1	-0.8	91	17.1	-17.1	0.2	91	28.1	-28.1	0.5			
26	264	9.3	9.2	1.0	257	10.0	9.7	2.3	262	5.8	5.7	0.8	288	1.3	1.2	-0.4	68	7.1	-6.6	-2.6	82	16.5	-16.3	-2.4	86	28.5	-28.4	-2.0			
27	259	9.8	9.6	1.9	243	8.3	7.4	3.7	264	5.3	5.3	0.6	277	0.8	0.8	-0.1	76	7.1	-6.9	-1.7	83	18.8	-18.6	-2.4	85	27.5	-27.4	-2.5			
28	263	9.0	8.9	1.1	248	9.8	9.1	3.7	259	6.6	6.5	1.3	300	1.6	1.4	-0.8	79	8.1	-8.0	-1.5	83	19.3	-19.1	-2.4	83	32.7	-32.5	-3.9			
29	256	9.4	9.1	2.2	246	9.6	8.8	3.9	250	6.5	6.1	2.2	257	0.9	0.9	0.2	82	8.3	-8.2	-1.2	84	20.1	-20.0	-2.0	84	33.6	-33.4	-3.7			
30	253	8.0	7.7	2.3	245	9.3	8.4	3.9	249	5.3	5.0	1.9	248	0.5	0.5	0.2	84	8.1	-8.0	-0.9	80	17.7	-17.4	-3.2	82	30.9	-30.6	-4.2			

Daily Normals of Upper Air Winds (1971-2000)

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MUMBAI

JULY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	256	9.0	8.7	2.2	246	9.8	8.9	4.0	259	6.3	6.2	1.2	231	1.4	1.1	0.9	86	8.0	-8.0	-0.5	86	18.3	-18.3	-1.3	84	31.4	-31.2	-3.4			
2	254	9.8	9.4	2.7	248	10.4	9.6	3.9	257	8.2	8.0	1.9	295	1.7	1.5	-0.7	84	9.3	-9.2	-1.0	85	20.0	-19.9	-1.9	83	29.0	-28.8	-3.4			
3	262	7.5	7.4	1.1	253	9.6	9.2	2.8	256	7.5	7.3	1.8	258	2.9	2.8	0.6	81	8.5	-8.4	-1.3	82	18.0	-17.8	-2.5	81	30.9	-30.5	-5.1			
4	255	8.7	8.4	2.2	251	9.0	8.5	3.0	261	6.9	6.8	1.1	235	2.1	1.7	1.2	81	8.1	-8.0	-1.3	87	19.3	-19.3	-1.1	84	30.7	-30.6	-3.0			
5	252	8.5	8.1	2.6	249	10.0	9.3	3.6	257	7.5	7.3	1.7	252	2.2	2.1	0.7	76	9.0	-8.7	-2.2	85	18.1	-18.0	-1.5	80	30.6	-30.1	-5.4			
6	259	9.1	8.9	1.7	250	9.7	9.1	3.4	256	7.6	7.4	1.8	289	1.8	1.7	-0.6	80	10.0	-9.9	-1.7	81	19.4	-19.2	-2.9	87	31.0	-31.0	-1.6			
7	251	10.3	9.7	3.4	253	10.7	10.2	3.2	264	8.2	8.2	0.9	278	3.0	3.0	-0.4	71	8.5	-8.0	-2.8	80	18.5	-18.2	-3.1	87	31.5	-31.5	-1.4			
8	252	10.2	9.7	3.2	256	10.4	10.1	2.6	270	7.9	7.9	0.0	281	1.6	1.6	-0.3	85	7.5	-7.5	-0.6	81	17.5	-17.3	-2.7	85	30.4	-30.3	-2.5			
9	258	10.3	10.1	2.2	252	10.6	10.1	3.3	270	8.5	8.5	0.0	292	1.8	1.7	-0.7	84	7.2	-7.2	-0.7	87	19.4	-19.4	-1.1	86	35.5	-35.4	-2.7			
10	261	9.9	9.8	1.6	252	11.0	10.5	3.4	261	8.8	8.7	1.4	254	1.9	1.8	0.5	80	9.4	-9.2	-1.7	84	20.4	-20.3	-2.1	82	32.8	-32.5	-4.4			
11	258	10.4	10.2	2.2	253	9.7	9.3	2.8	264	7.5	7.5	0.8	284	2.5	2.4	-0.6	81	8.6	-8.5	-1.3	87	21.6	-21.6	-1.1	84	31.0	-30.8	-3.3			
12	254	11.6	11.2	3.2	251	8.8	8.3	2.9	264	7.6	7.6	0.8	283	2.2	2.1	-0.5	85	8.7	-8.7	-0.8	92	20.8	-20.8	0.8	83	33.5	-33.2	-4.1			
13	255	11.4	11.0	3.0	255	10.3	10.0	2.6	265	7.7	7.7	0.7	285	1.1	1.1	-0.3	80	8.0	-7.9	-1.4	87	20.9	-20.9	-1.1	83	34.5	-34.2	-4.4			
14	256	11.0	10.7	2.7	254	9.5	9.1	2.6	258	7.9	7.7	1.7	265	2.1	2.1	0.2	81	8.1	-8.0	-1.3	86	20.7	-20.6	-1.5	79	34.8	-34.1	-6.8			
15	248	9.8	9.1	3.7	253	10.9	10.4	3.2	255	9.0	8.7	2.3	229	2.0	1.5	1.3	79	8.7	-8.5	-1.7	83	19.5	-19.4	-2.4	83	31.6	-31.4	-3.9			
16	251	10.2	9.6	3.3	257	10.9	10.6	2.4	261	9.3	9.2	1.5	252	1.9	1.8	0.6	81	7.9	-7.8	-1.2	88	20.7	-20.7	-0.9	84	30.8	-30.7	-3.0			
17	252	11.4	10.8	3.6	253	11.6	11.1	3.3	258	9.8	9.6	2.1	255	1.6	1.5	0.4	85	9.1	-9.1	-0.8	85	21.7	-21.6	-2.0	80	30.9	-30.5	-5.2			
18	259	11.7	11.5	2.3	255	11.6	11.2	3.1	255	9.2	8.9	2.4	239	2.9	2.5	1.5	86	8.8	-8.8	-0.6	82	19.9	-19.7	-2.6	82	33.1	-32.8	-4.7			
19	258	10.4	10.2	2.1	251	10.9	10.3	3.5	254	9.2	8.9	2.5	230	3.5	2.7	2.3	82	8.6	-8.5	-1.2	80	18.8	-18.5	-3.4	81	32.3	-31.9	-5.3			
20	257	12.4	12.1	2.9	254	11.1	10.7	3.1	262	8.9	8.8	1.3	258	1.9	1.9	0.4	79	8.6	-8.5	-1.6	89	21.1	-21.1	-0.5	85	30.9	-30.8	-2.9			
21	263	10.3	10.2	1.3	256	10.0	9.7	2.4	264	7.4	7.4	0.8	270	1.6	1.6	0.0	80	10.0	-9.8	-1.8	86	20.4	-20.4	-1.4	85	32.9	-32.8	-3.0			
22	261	10.0	9.9	1.5	252	9.4	8.9	2.9	254	7.4	7.1	2.0	6	1.0	-0.1	-1.0	81	9.5	-9.4	-1.5	84	23.1	-23.0	-2.5	83	33.0	-32.7	-4.3			
23	270	10.2	10.2	0.0	256	8.9	8.7	2.1	263	7.0	6.9	0.9	318	1.3	0.9	-1.0	81	10.4	-10.3	-1.7	86	21.5	-21.4	-1.6	84	33.7	-33.5	-3.3			
24	276	11.8	11.7	-1.3	263	10.1	10.0	1.3	268	8.1	8.1	0.3	277	2.3	2.3	-0.3	75	9.8	-9.5	-2.5	84	22.4	-22.3	-2.5	82	33.5	-33.2	-4.6			
25	274	10.3	10.3	-0.8	259	10.6	10.4	2.1	263	8.6	8.5	1.0	285	2.0	1.9	-0.5	83	9.3	-9.2	-1.2	83	20.4	-20.3	-2.4	90	32.9	-32.9	0.1			
26	269	10.1	10.1	0.2	258	11.2	10.9	2.4	269	8.9	8.9	0.1	309	2.2	1.7	-1.4	82	9.8	-9.7	-1.4	84	20.9	-20.8	-2.1	84	35.7	-35.5	-3.7			
27	273	10.7	10.7	-0.5	260	10.9	10.7	1.8	271	8.1	8.1	-0.2	309	2.2	1.7	-1.4	75	8.6	-8.3	-2.2	85	22.4	-22.3	-2.1	89	35.6	-35.6	-0.5			
28	267	10.5	10.5	0.5	261	11.5	11.4	1.8	269	8.6	8.6	0.2	304	1.4	1.2	-0.8	82	8.7	-8.6	-1.2	88	23.2	-23.2	-1.0	88	31.6	-31.6	-1.2			
29	257	9.7	9.4	2.2	258	10.2	10.0	2.1	271	9.9	9.9	-0.2	284	2.1	2.0	-0.5	86	7.9	-7.9	-0.6	85	20.2	-20.1	-1.8	86	33.6	-33.5	-2.6			
30	265	10.1	10.1	0.9	258	10.4	10.2	2.2	265	8.3	8.3	0.7	297	2.9	2.6	-1.3	89	7.9	-7.9	-0.2	82	19.2	-19.0	-2.8	85	33.6	-33.5	-3.0			
31	261	12.5	12.3	2.0	256	10.5	10.2	2.5	269	8.3	8.3	0.2	324	2.2	1.3	-1.8	79	9.6	-9.4	-1.9	86	19.3	-19.3	-1.3	86	33.9	-33.8	-2.2			

Daily Normals of Upper Air Winds (1971-2000)

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MUMBAI

AUGUST

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	268	10.7	10.7	0.4	260	10.7	10.5	1.9	268	7.8	7.8	0.3	346	0.8	0.2	-0.8	78	10.4	-10.2	-2.2	88	19.8	-19.8	-0.8	84	32.1	-32.0	-3.1			
2	270	10.0	10.0	0.0	264	9.5	9.4	1.0	268	8.0	8.0	0.3	283	1.8	1.8	-0.4	85	9.1	-9.1	-0.8	89	20.2	-20.2	-0.5	82	32.5	-32.2	-4.7			
3	264	9.7	9.6	1.0	258	10.1	9.9	2.1	263	7.1	7.0	0.9	312	1.5	1.1	-1.0	80	10.3	-10.1	-1.8	87	22.3	-22.3	-1.2	86	32.4	-32.3	-2.1			
4	265	10.0	10.0	0.8	260	10.2	10.0	1.8	267	8.2	8.2	0.5	281	3.1	3.0	-0.6	84	8.2	-8.2	-0.9	84	18.7	-18.6	-1.9	89	30.2	-30.2	-0.7			
5	266	10.3	10.3	0.8	259	10.9	10.7	2.1	262	10.0	9.9	1.4	292	3.7	3.4	-1.4	84	8.1	-8.0	-0.9	84	18.4	-18.3	-2.0	84	29.2	-29.1	-2.9			
6	269	11.4	11.4	0.2	258	9.7	9.5	2.1	271	8.6	8.6	-0.2	285	3.1	3.0	-0.8	76	8.2	-8.0	-2.0	85	20.7	-20.6	-1.7	84	33.1	-32.9	-3.3			
7	265	10.3	10.3	0.9	262	10.2	10.1	1.5	271	9.5	9.5	-0.2	304	3.4	2.8	-1.9	76	7.6	-7.4	-1.8	86	20.8	-20.7	-1.6	91	30.1	-30.1	0.5			
8	275	10.4	10.4	-1.0	265	9.9	9.9	0.8	271	9.4	9.4	-0.1	287	3.0	2.9	-0.9	83	8.5	-8.4	-1.1	85	19.5	-19.4	-1.7	88	30.6	-30.6	-1.0			
9	266	10.1	10.1	0.7	259	10.6	10.4	2.1	272	8.7	8.7	-0.3	324	1.7	1.0	-1.4	79	9.9	-9.7	-1.8	89	18.7	-18.7	-0.2	90	32.1	-32.1	0.0			
10	266	9.5	9.5	0.7	262	9.3	9.2	1.3	267	7.2	7.2	0.4	360	0.7	0.0	-0.7	83	8.6	-8.5	-1.0	86	17.5	-17.5	-1.2	88	30.2	-30.2	-1.1			
11	262	9.6	9.5	1.3	259	9.8	9.6	1.8	261	7.9	7.8	1.3	256	1.6	1.6	0.4	78	8.4	-8.2	-1.8	89	19.9	-19.9	-0.5	86	36.2	-36.1	-2.8			
12	263	10.1	10.0	1.2	261	9.7	9.6	1.5	267	8.6	8.6	0.5	282	2.4	2.3	-0.5	79	9.7	-9.5	-1.9	89	19.1	-19.1	-0.5	85	30.6	-30.5	-2.9			
13	259	9.7	9.5	1.8	259	10.9	10.7	2.0	264	9.3	9.2	1.0	296	3.0	2.7	-1.3	75	7.9	-7.6	-2.0	84	18.9	-18.8	-1.9	85	28.8	-28.7	-2.7			
14	266	8.6	8.6	0.6	263	10.1	10.0	1.2	266	8.9	8.9	0.6	317	1.6	1.1	-1.2	81	8.0	-7.9	-1.2	86	19.2	-19.2	-1.3	82	29.1	-28.8	-4.3			
15	272	8.1	8.1	-0.3	263	9.1	9.0	1.1	272	7.3	7.3	-0.3	309	2.1	1.6	-1.3	81	7.9	-7.8	-1.3	87	18.7	-18.7	-1.1	84	30.1	-29.9	-3.0			
16	277	7.5	7.4	-0.9	264	9.0	9.0	0.9	277	6.9	6.9	-0.8	302	1.3	1.1	-0.7	81	8.4	-8.3	-1.3	84	19.1	-19.0	-2.1	85	27.8	-27.7	-2.4			
17	277	8.5	8.4	-1.1	263	8.4	8.3	1.0	276	6.1	6.1	-0.6	330	1.6	0.8	-1.4	89	7.8	-7.8	-0.1	85	17.8	-17.7	-1.7	83	28.8	-28.6	-3.7			
18	274	8.0	8.0	-0.6	263	9.3	9.2	1.2	270	6.4	6.4	0.0	323	1.5	0.9	-1.2	82	8.3	-8.2	-1.2	84	18.7	-18.6	-1.9	86	26.7	-26.6	-2.0			
19	268	8.0	8.0	0.3	260	7.7	7.6	1.3	275	6.9	6.9	-0.6	288	2.0	1.9	-0.6	77	7.8	-7.6	-1.8	87	19.1	-19.1	-1.1	84	29.8	-29.6	-3.0			
20	272	8.2	8.2	-0.3	257	8.8	8.6	2.0	264	7.6	7.6	0.8	253	1.4	1.3	0.4	77	7.5	-7.3	-1.7	88	20.1	-20.1	-0.7	88	27.3	-27.3	-1.0			
21	279	8.1	8.0	-1.2	263	8.8	8.7	1.0	264	7.0	7.0	0.7	275	1.2	1.2	-0.1	82	8.8	-8.7	-1.2	88	19.3	-19.3	-0.6	87	28.8	-28.8	-1.4			
22	275	5.3	5.3	-0.5	263	7.4	7.3	0.9	276	4.8	4.8	-0.5	86	1.3	-1.3	-0.1	79	8.6	-8.5	-1.6	85	19.7	-19.6	-1.6	90	27.1	-27.1	-0.1			
23	276	6.7	6.7	-0.7	262	7.6	7.5	1.1	261	5.5	5.4	0.9	284	0.4	0.4	-0.1	79	8.2	-8.0	-1.6	87	16.8	-16.8	-1.0	87	27.4	-27.4	-1.3			
24	274	7.5	7.5	-0.5	263	7.7	7.6	0.9	266	5.5	5.5	0.4	231	1.4	1.1	0.9	95	7.2	-7.2	0.6	88	17.9	-17.9	-0.6	80	29.3	-28.9	-4.9			
25	260	6.6	6.5	1.2	258	8.0	7.8	1.7	265	6.5	6.5	0.6	246	1.0	0.9	0.4	86	6.1	-6.1	-0.4	86	17.3	-17.3	-1.1	85	24.6	-24.5	-2.0			
26	273	8.9	8.9	-0.4	264	8.6	8.6	0.9	272	6.9	6.9	-0.2	305	3.3	2.7	-1.9	81	8.4	-8.3	-1.3	86	17.6	-17.6	-1.1	89	26.3	-26.3	-0.5			
27	276	7.2	7.2	-0.8	259	8.6	8.4	1.6	277	6.3	6.2	-0.8	294	3.7	3.4	-1.5	75	8.5	-8.2	-2.2	83	18.8	-18.6	-2.4	83	27.3	-27.1	-3.1			
28	269	8.2	8.2	0.2	261	8.7	8.6	1.3	263	7.0	7.0	0.8	281	2.6	2.6	-0.5	79	7.6	-7.5	-1.5	85	17.4	-17.3	-1.4	81	27.3	-27.0	-4.3			
29	275	7.8	7.8	-0.7	261	9.8	9.7	1.5	259	7.6	7.5	1.4	280	2.2	2.2	-0.4	70	7.2	-6.7	-2.5	82	16.7	-16.5	-2.4	86	26.1	-26.1	-1.6			
30	278	8.5	8.4	-1.2	262	9.1	9.0	1.2	266	7.0	7.0	0.5	274	1.5	1.5	-0.1	85	7.8	-7.8	-0.7	84	15.3	-15.2	-1.7	87	25.9	-25.9	-1.2			
31	274	7.5	7.5	-0.5	266	7.9	7.9	0.5	263	6.4	6.3	0.8	7	0.8	-0.1	-0.8	80	8.5	-8.4	-1.5	82	18.3	-18.1	-2.7	85	27.4	-27.3	-2.4			

Daily Normals of Upper Air Winds (1971-2000)

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MUMBAI

SEPTEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	277	8.7	8.6	-1.0	266	7.5	7.5	0.5	254	6.1	5.9	1.7	309	1.3	1.0	-0.8	79	6.3	-6.2	-1.2	87	17.1	-17.1	-1.0	80	25.8	-25.4	-4.4			
2	266	9.7	9.7	0.7	265	8.2	8.2	0.7	267	6.0	6.0	0.3	300	2.4	2.1	-1.2	79	7.7	-7.6	-1.5	81	17.2	-17.0	-2.8	82	26.1	-25.8	-3.7			
3	270	7.6	7.6	0.0	256	7.4	7.2	1.8	258	6.3	6.2	1.3	247	2.3	2.1	0.9	77	5.7	-5.5	-1.3	83	14.1	-14.0	-1.6	80	24.2	-23.8	-4.1			
4	282	8.8	8.6	-1.8	257	8.2	8.0	1.8	255	6.1	5.9	1.6	258	1.4	1.4	0.3	77	6.3	-6.1	-1.4	84	16.3	-16.2	-1.8	85	23.7	-23.6	-2.1			
5	277	8.2	8.1	-1.0	257	7.3	7.1	1.7	257	5.5	5.4	1.2	277	1.7	1.7	-0.2	86	8.8	-8.8	-0.6	84	17.4	-17.3	-1.7	85	24.5	-24.4	-2.1			
6	283	7.2	7.0	-1.6	260	7.2	7.1	1.2	263	5.2	5.2	0.6	263	2.3	2.3	0.3	84	7.3	-7.3	-0.8	85	15.3	-15.2	-1.4	79	21.9	-21.5	-4.0			
7	269	6.2	6.2	0.1	259	7.0	6.9	1.4	262	4.8	4.7	0.7	281	1.6	1.6	-0.3	75	6.7	-6.5	-1.8	85	15.6	-15.5	-1.4	86	22.9	-22.8	-1.6			
8	271	6.7	6.7	-0.1	260	6.6	6.5	1.1	262	4.1	4.1	0.6	315	1.1	0.8	-0.8	81	6.7	-6.6	-1.1	87	14.8	-14.8	-0.8	88	22.5	-22.5	-0.9			
9	261	5.6	5.5	0.9	261	4.5	4.4	0.7	270	4.0	4.0	0.0	261	0.6	0.6	0.1	76	6.0	-5.8	-1.4	94	13.7	-13.7	0.9	87	21.6	-21.6	-1.2			
10	265	5.8	5.8	0.5	263	4.8	4.8	0.6	266	3.1	3.1	0.2	153	0.2	-0.1	0.2	83	6.9	-6.9	-0.8	90	15.0	-15.0	0.0	89	21.0	-21.0	-0.5			
11	279	4.9	4.8	-0.8	270	4.0	4.0	0.0	270	2.0	2.0	0.0	34	0.7	-0.4	-0.6	76	5.5	-5.3	-1.3	90	14.1	-14.1	0.0	84	19.6	-19.5	-2.0			
12	288	6.2	5.9	-1.9	260	4.0	3.9	0.7	260	2.2	2.2	0.4	171	0.6	-0.1	0.6	80	8.6	-8.5	-1.5	88	14.4	-14.4	-0.4	85	20.2	-20.1	-1.7			
13	291	5.8	5.4	-2.1	261	3.3	3.3	0.5	225	1.6	1.1	1.1	180	1.0	0.0	1.0	94	6.6	-6.6	0.5	93	13.7	-13.7	0.7	88	21.9	-21.9	-0.8			
14	290	5.9	5.6	-2.0	265	3.6	3.6	0.3	270	2.0	2.0	0.0	172	0.7	-0.1	0.7	80	6.4	-6.3	-1.1	87	13.2	-13.2	-0.8	85	22.9	-22.8	-2.0			
15	294	6.6	6.0	-2.7	272	2.6	2.6	-0.1	284	2.1	2.0	-0.5	27	0.4	-0.2	-0.4	91	6.3	-6.3	0.1	92	12.2	-12.2	0.4	88	18.6	-18.6	-0.5			
16	289	6.0	5.7	-2.0	279	2.6	2.6	-0.4	262	1.4	1.4	0.2	45	0.3	-0.2	-0.2	88	5.8	-5.8	-0.2	94	12.7	-12.7	0.9	89	19.1	-19.1	-0.3			
17	290	5.0	4.7	-1.7	294	2.0	1.8	-0.8	214	0.7	0.4	0.6	112	0.5	-0.5	0.2	89	5.3	-5.3	-0.1	96	10.5	-10.4	1.1	92	18.6	-18.6	0.5			
18	280	5.7	5.6	-1.0	276	2.0	2.0	-0.2	252	0.6	0.6	0.2	321	0.6	0.4	-0.5	86	5.4	-5.4	-0.4	102	10.3	-10.1	2.1	91	19.1	-19.1	0.2			
19	288	4.9	4.7	-1.5	298	1.5	1.3	-0.7	311	0.9	0.7	-0.6	211	0.6	0.3	0.5	97	4.1	-4.1	0.5	104	9.0	-8.7	2.2	93	16.7	-16.7	0.9			
20	300	5.1	4.4	-2.5	270	0.8	0.8	0.0	270	0.4	0.4	0.0	138	1.5	-1.0	1.1	99	4.9	-4.8	0.8	102	9.0	-8.8	1.9	97	16.6	-16.5	2.0			
21	313	3.7	2.7	-2.5	288	0.9	0.9	-0.3	121	0.6	-0.5	0.3	171	1.2	-0.2	1.2	94	5.7	-5.7	0.4	102	10.0	-9.8	2.1	93	15.3	-15.3	0.9			
22	296	3.7	3.3	-1.6	288	1.6	1.5	-0.5	333	0.4	0.2	-0.4	121	0.6	-0.5	0.3	89	6.4	-6.4	-0.1	96	9.6	-9.5	1.0	83	14.9	-14.8	-1.9			
23	310	3.4	2.6	-2.2	299	1.8	1.6	-0.9	270	1.1	1.1	0.0	45	0.3	-0.2	-0.2	99	5.1	-5.0	0.8	92	8.8	-8.8	0.3	92	16.0	-16.0	0.5			
24	308	3.6	2.8	-2.2	315	1.4	1.0	-1.0	14	0.4	-0.1	-0.4	76	1.6	-1.6	-0.4	93	4.5	-4.5	0.2	106	9.3	-9.0	2.5	92	17.4	-17.4	0.5			
25	306	4.3	3.5	-2.5	341	1.8	0.6	-1.7	95	1.1	-1.1	0.1	72	2.2	-2.1	-0.7	85	4.2	-4.2	-0.4	88	8.7	-8.7	-0.3	89	15.3	-15.3	-0.2			
26	303	4.5	3.8	-2.5	342	0.9	0.3	-0.9	82	1.5	-1.5	-0.2	48	1.3	-1.0	-0.9	95	3.5	-3.5	0.3	90	8.9	-8.9	0.0	88	14.5	-14.5	-0.6			
27	332	3.6	1.7	-3.2	328	1.3	0.7	-1.1	225	0.1	0.1	0.1	135	0.8	-0.6	0.6	101	3.8	-3.7	0.7	94	8.2	-8.2	0.6	92	12.6	-12.6	0.4			
28	326	2.9	1.6	-2.4	14	0.8	-0.2	-0.8	27	0.7	-0.3	-0.6	124	0.4	-0.3	0.2	113	2.6	-2.4	1.0	99	7.1	-7.0	1.1	86	13.8	-13.8	-1.0			
29	339	3.0	1.1	-2.8	11	1.0	-0.2	-1.0	79	1.6	-1.6	-0.3	168	1.4	-0.3	1.4	102	2.9	-2.8	0.6	92	7.4	-7.4	0.2	97	13.9	-13.8	1.8			
30	315	2.0	1.4	-1.4	29	1.0	-0.5	-0.9	94	1.3	-1.3	0.1	114	1.7	-1.6	0.7	103	2.8	-2.7	0.6	110	6.7	-6.3	2.3	96	13.6	-13.5	1.4			

Daily Normals of Upper Air Winds (1971-2000)

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MUMBAI

OCTOBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	277	0.8	0.8	-0.1	20	1.2	-0.4	-1.1	60	2.4	-2.1	-1.2	55	2.1	-1.7	-1.2	99	1.9	-1.9	0.3	122	5.3	-4.5	2.8	102	12.9	-12.6	2.7			
2	325	2.9	1.7	-2.4	9	1.9	-0.3	-1.9	54	3.1	-2.5	-1.8	47	2.3	-1.7	-1.6	103	2.2	-2.1	0.5	117	6.0	-5.4	2.7	100	12.1	-11.9	2.0			
3	311	3.7	2.8	-2.4	8	2.1	-0.3	-2.1	31	2.9	-1.5	-2.5	24	2.4	-1.0	-2.2	90	1.3	-1.3	0.0	126	5.8	-4.7	3.4	106	12.6	-12.1	3.4			
4	336	4.4	1.8	-4.0	6	1.8	-0.2	-1.8	43	2.3	-1.6	-1.7	16	1.8	-0.5	-1.7	83	0.8	-0.8	-0.1	122	7.0	-5.9	3.7	98	11.7	-11.6	1.6			
5	324	2.9	1.7	-2.3	36	2.4	-1.4	-1.9	64	2.8	-2.5	-1.2	40	2.6	-1.7	-2.0	102	2.4	-2.3	0.5	119	6.5	-5.7	3.2	105	11.6	-11.2	3.0			
6	341	2.4	0.8	-2.3	48	1.3	-1.0	-0.9	68	2.7	-2.5	-1.0	35	2.8	-1.6	-2.3	137	1.8	-1.2	1.3	145	3.8	-2.2	3.1	101	10.9	-10.7	2.1			
7	10	2.7	-0.5	-2.7	47	1.8	-1.3	-1.2	39	2.1	-1.3	-1.6	345	1.1	0.3	-1.1	167	0.9	-0.2	0.9	143	3.9	-2.3	3.1	106	11.0	-10.6	3.1			
8	8	2.9	-0.4	-2.9	51	2.1	-1.6	-1.3	60	2.2	-1.9	-1.1	24	1.7	-0.7	-1.6	221	1.1	0.7	0.8	161	4.9	-1.6	4.6	101	8.7	-8.6	1.6			
9	19	3.7	-1.2	-3.5	40	3.0	-1.9	-2.3	58	4.1	-3.5	-2.2	50	2.6	-2.0	-1.7	94	1.6	-1.6	0.1	167	3.1	-0.7	3.0	102	6.9	-6.8	1.4			
10	5	2.3	-0.2	-2.3	47	1.9	-1.4	-1.3	62	4.7	-4.1	-2.2	74	2.2	-2.1	-0.6	135	0.7	-0.5	0.5	146	4.3	-2.4	3.6	107	8.6	-8.2	2.5			
11	356	4.2	0.3	-4.2	45	3.1	-2.2	-2.2	57	3.8	-3.2	-2.1	76	1.6	-1.6	-0.4	170	1.1	-0.2	1.1	172	3.6	-0.5	3.6	99	7.5	-7.4	1.2			
12	23	0.8	-0.3	-0.7	42	2.8	-1.9	-2.1	68	3.5	-3.2	-1.3	58	0.9	-0.8	-0.5	211	2.1	1.1	1.8	182	3.2	0.1	3.2	90	4.7	-4.7	0.0			
13	243	0.7	0.6	0.3	52	2.3	-1.8	-1.4	66	2.7	-2.5	-1.1	7	1.6	-0.2	-1.6	263	3.4	3.4	0.4	208	4.5	2.1	4.0	114	7.0	-6.4	2.8			
14	286	1.8	1.7	-0.5	17	3.4	-1.0	-3.2	58	2.6	-2.2	-1.4	13	1.7	-0.4	-1.7	243	3.3	2.9	1.5	202	5.7	2.1	5.3	130	4.5	-3.5	2.9			
15	20	2.0	-0.7	-1.9	41	3.0	-2.0	-2.3	82	3.0	-3.0	-0.4	360	2.7	0.0	-2.7	268	3.7	3.7	0.1	197	6.7	1.9	6.4	121	6.3	-5.4	3.2			
16	343	1.4	0.4	-1.3	41	1.8	-1.2	-1.4	73	3.4	-3.3	-1.0	14	1.6	-0.4	-1.6	210	1.6	0.8	1.4	177	5.7	-0.3	5.7	101	8.7	-8.6	1.6			
17	346	2.9	0.7	-2.8	57	2.0	-1.7	-1.1	93	2.0	-2.0	0.1	357	1.9	0.1	-1.9	257	2.7	2.6	0.6	190	5.0	0.9	4.9	138	6.2	-4.1	4.6			
18	338	4.1	1.5	-3.8	40	2.3	-1.5	-1.8	74	2.9	-2.8	-0.8	18	1.3	-0.4	-1.2	239	2.9	2.5	1.5	203	7.0	2.7	6.5	103	7.4	-7.2	1.7			
19	332	3.2	1.5	-2.8	54	1.9	-1.5	-1.1	82	3.0	-3.0	-0.4	356	3.1	0.2	-3.1	244	3.2	2.9	1.4	208	5.8	2.7	5.1	114	3.9	-3.6	1.6			
20	343	3.4	1.0	-3.3	71	3.1	-2.9	-1.0	78	4.3	-4.2	-0.9	19	2.1	-0.7	-2.0	265	3.8	3.8	0.3	242	5.3	4.7	2.5	95	2.3	-2.3	0.2			
21	4	3.0	-0.2	-3.0	63	2.5	-2.2	-1.1	78	2.4	-2.3	-0.5	7	0.8	-0.1	-0.8	261	3.8	3.8	0.6	235	3.8	3.1	2.2	116	5.7	-5.1	2.5			
22	8	3.4	-0.5	-3.4	61	2.9	-2.5	-1.4	92	2.6	-2.6	0.1	301	0.6	0.5	-0.3	261	4.3	4.2	0.7	228	6.4	4.8	4.3	134	4.3	-3.1	3.0			
23	2	3.1	-0.1	-3.1	50	3.1	-2.4	-2.0	66	3.5	-3.2	-1.4	300	0.8	0.7	-0.4	262	6.1	6.0	0.8	225	8.3	5.8	5.9	145	4.9	-2.8	4.0			
24	57	2.4	-2.0	-1.3	70	3.0	-2.8	-1.0	86	2.9	-2.9	-0.2	281	0.5	0.5	-0.1	243	6.5	5.8	2.9	224	9.1	6.3	6.5	115	4.4	-4.0	1.9			
25	27	0.9	-0.4	-0.8	70	3.0	-2.8	-1.0	110	2.0	-1.9	0.7	266	2.8	2.8	0.2	258	8.3	8.1	1.7	238	11.0	9.3	5.8	234	2.9	2.3	1.7			
26	45	1.7	-1.2	-1.2	80	2.8	-2.8	-0.5	126	2.2	-1.8	1.3	288	1.9	1.8	-0.6	250	7.6	7.1	2.6	231	12.7	9.9	8.0	169	3.2	-0.6	3.1			
27	17	3.8	-1.1	-3.6	60	3.4	-3.0	-1.7	79	3.2	-3.1	-0.6	278	1.4	1.4	-0.2	246	7.9	7.2	3.2	222	12.2	8.1	9.1	188	3.4	0.5	3.4			
28	6	2.9	-0.3	-2.9	63	4.2	-3.7	-1.9	72	3.9	-3.7	-1.2	326	1.8	1.0	-1.5	258	7.4	7.2	1.5	231	12.2	9.5	7.6	240	4.4	3.8	2.2			
29	358	5.1	0.2	-5.1	59	3.9	-3.3	-2.0	80	3.5	-3.4	-0.6	312	2.5	1.9	-1.7	257	8.6	8.4	1.9	228	11.7	8.7	7.8	165	1.1	-0.3	1.1			
30	14	3.4	-0.8	-3.3	54	4.2	-3.4	-2.5	79	3.3	-3.2	-0.6	293	1.5	1.4	-0.6	242	9.0	8.0	4.2	234	12.5	10.1	7.3	166	3.0	-0.7	2.9			
31	1	4.1	-0.1	-4.1	63	4.4	-3.9	-2.0	75	3.8	-3.7	-1.0	322	2.3	1.4	-1.8	264	8.1	8.1	0.9	234	12.6	10.2	7.4	159	4.0	-1.4	3.7			

Daily Normals of Upper Air Winds (1971-2000)

MUMBAI

NOVEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	27	3.3	-1.5	-2.9	70	4.0	-3.8	-1.4	77	4.7	-4.6	-1.1	18	2.6	-0.8	-2.5	261	7.5	7.4	1.2	239	11.0	9.5	5.6	119	2.1	-1.8	1.0
2	9	2.6	-0.4	-2.6	74	3.3	-3.2	-0.9	86	4.6	-4.6	-0.3	360	2.4	0.0	-2.4	260	7.7	7.6	1.3	236	11.0	9.2	6.1	136	2.9	-2.0	2.1
3	19	3.9	-1.3	-3.7	64	4.1	-3.7	-1.8	80	4.0	-3.9	-0.7	331	2.9	1.4	-2.5	265	7.1	7.1	0.6	234	12.0	9.7	7.0	153	2.7	-1.2	2.4
4	353	2.3	0.3	-2.3	60	3.4	-2.9	-1.7	69	3.3	-3.1	-1.2	342	2.3	0.7	-2.2	271	9.1	9.1	-0.1	242	12.2	10.7	5.8	260	1.1	1.1	0.2
5	8	3.0	-0.4	-3.0	59	3.3	-2.8	-1.7	66	3.4	-3.1	-1.4	340	2.9	1.0	-2.7	269	8.4	8.4	0.2	239	12.1	10.3	6.3	129	1.4	-1.1	0.9
6	23	3.8	-1.5	-3.5	62	3.2	-2.8	-1.5	70	3.3	-3.1	-1.1	45	0.8	-0.6	-0.6	265	8.2	8.2	0.7	239	11.4	9.8	5.9	177	3.3	-0.2	3.3
7	6	2.8	-0.3	-2.8	71	3.4	-3.2	-1.1	77	2.6	-2.5	-0.6	328	0.9	0.5	-0.8	257	8.8	8.6	2.0	233	13.1	10.5	7.9	228	3.0	2.2	2.0
8	26	2.8	-1.2	-2.5	56	1.8	-1.5	-1.0	82	2.1	-2.1	-0.3	313	1.6	1.2	-1.1	262	9.7	9.6	1.4	235	11.9	9.8	6.8	257	1.7	1.7	0.4
9	360	2.4	0.0	-2.4	63	3.1	-2.8	-1.4	81	2.6	-2.6	-0.4	321	2.1	1.3	-1.6	267	9.1	9.1	0.5	236	13.0	10.8	7.2	196	2.5	0.7	2.4
10	357	1.8	0.1	-1.8	77	2.7	-2.6	-0.6	93	2.0	-2.0	0.1	320	2.3	1.5	-1.8	263	9.7	9.6	1.2	242	11.6	10.3	5.4	245	3.5	3.2	1.5
11	14	2.9	-0.7	-2.8	74	2.5	-2.4	-0.7	88	2.4	-2.4	-0.1	307	2.1	1.7	-1.3	269	8.1	8.1	0.2	254	11.4	10.9	3.2	94	1.4	-1.4	0.1
12	37	3.0	-1.8	-2.4	71	2.8	-2.6	-0.9	73	2.7	-2.6	-0.8	346	2.5	0.6	-2.4	267	8.9	8.9	0.5	241	12.5	11.0	6.0	242	2.1	1.9	1.0
13	360	3.3	0.0	-3.3	74	4.0	-3.8	-1.1	76	3.6	-3.5	-0.9	351	2.6	0.4	-2.6	266	8.9	8.9	0.6	249	13.9	13.0	5.0	253	4.5	4.3	1.3
14	346	2.9	0.7	-2.8	74	3.2	-3.1	-0.9	72	4.7	-4.5	-1.5	360	1.5	0.0	-1.5	260	9.9	9.8	1.7	238	15.3	13.0	8.0	250	5.1	4.8	1.7
15	16	3.3	-0.9	-3.2	77	4.1	-4.0	-0.9	74	4.4	-4.2	-1.2	297	0.4	0.4	-0.2	248	9.8	9.1	3.7	233	14.9	12.0	8.9	272	4.6	4.6	-0.2
16	34	2.3	-1.3	-1.9	74	3.6	-3.5	-1.0	68	3.7	-3.4	-1.4	286	2.6	2.5	-0.7	249	11.8	11.0	4.3	235	18.0	14.8	10.2	249	3.9	3.6	1.4
17	49	3.0	-2.3	-2.0	79	3.8	-3.7	-0.7	65	2.9	-2.6	-1.2	279	3.6	3.6	-0.6	257	13.2	12.9	3.0	239	18.4	15.8	9.4	257	7.5	7.3	1.7
18	355	2.4	0.2	-2.4	71	2.8	-2.6	-0.9	72	1.3	-1.2	-0.4	282	4.5	4.4	-0.9	260	14.8	14.6	2.5	240	16.4	14.2	8.2	249	5.3	4.9	1.9
19	335	3.5	1.5	-3.2	67	2.6	-2.4	-1.0	56	1.8	-1.5	-1.0	275	4.6	4.6	-0.4	253	13.9	13.3	4.0	237	17.5	14.7	9.5	240	8.9	7.7	4.5
20	343	1.4	0.4	-1.3	62	1.9	-1.7	-0.9	354	1.9	0.2	-1.9	284	6.2	6.0	-1.5	251	14.1	13.3	4.6	239	19.5	16.7	10.1	262	5.3	5.3	0.7
21	332	1.7	0.8	-1.5	77	2.7	-2.6	-0.6	63	0.4	-0.4	-0.2	266	5.6	5.6	0.4	259	16.7	16.4	3.1	235	20.6	17.0	11.7	246	6.1	5.6	2.5
22	6	1.9	-0.2	-1.9	72	1.9	-1.8	-0.6	30	0.8	-0.4	-0.7	287	5.7	5.4	-1.7	258	16.2	15.9	3.3	239	19.1	16.4	9.7	259	8.6	8.4	1.6
23	6	2.7	-0.3	-2.7	88	2.5	-2.5	-0.1	84	0.9	-0.9	-0.1	284	4.5	4.4	-1.1	268	14.1	14.1	0.4	247	19.0	17.5	7.5	252	7.6	7.2	2.4
24	25	2.6	-1.1	-2.4	92	2.5	-2.5	0.1	75	2.0	-1.9	-0.5	288	5.5	5.2	-1.7	259	14.0	13.7	2.7	245	17.9	16.2	7.7	245	8.5	7.7	3.6
25	11	2.1	-0.4	-2.1	99	2.5	-2.5	0.4	98	0.7	-0.7	0.1	285	4.2	4.1	-1.1	262	14.0	13.9	2.0	244	18.0	16.1	8.0	265	6.4	6.4	0.6
26	2	3.6	-0.1	-3.6	80	2.3	-2.3	-0.4	67	1.3	-1.2	-0.5	267	4.2	4.2	0.2	253	14.1	13.5	4.1	244	19.5	17.5	8.7	249	5.6	5.2	2.0
27	14	3.3	-0.8	-3.2	88	2.7	-2.7	-0.1	164	1.5	-0.4	1.4	268	5.6	5.6	0.2	254	15.8	15.2	4.4	242	20.8	18.3	9.8	246	5.4	4.9	2.2
28	4	2.7	-0.2	-2.7	85	2.4	-2.4	-0.2	286	0.7	0.7	-0.2	268	6.3	6.3	0.2	254	17.6	16.9	4.8	239	21.9	18.8	11.3	248	9.7	9.0	3.7
29	349	1.5	0.3	-1.5	77	2.6	-2.5	-0.6	31	0.6	-0.3	-0.5	268	7.5	7.5	0.3	260	17.4	17.1	3.0	245	22.6	20.6	9.4	243	11.3	10.1	5.1
30	352	3.6	0.5	-3.6	71	2.4	-2.3	-0.8	14	0.4	-0.1	-0.4	277	6.4	6.3	-0.8	258	16.5	16.2	3.3	241	21.4	18.6	10.5	240	10.4	9.0	5.2

Daily Normals of Upper Air Winds (1971-2000)

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MUMBAI

DECEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	11	2.0	-0.4	-2.0	80	2.2	-2.2	-0.4	76	0.4	-0.4	-0.1	275	5.6	5.6	-0.5	259	17.1	16.8	3.2	245	20.9	18.9	9.0	264	9.5	9.4	1.0			
2	21	2.8	-1.0	-2.6	72	1.6	-1.5	-0.5	180	0.3	0.0	0.3	262	6.4	6.3	0.9	251	15.1	14.3	5.0	240	19.9	17.2	10.0	264	7.6	7.6	0.8			
3	358	2.7	0.1	-2.7	83	2.3	-2.3	-0.3	180	0.4	0.0	0.4	265	6.3	6.3	0.5	252	15.0	14.2	4.7	239	19.8	16.9	10.3	234	9.9	8.0	5.9			
4	16	2.5	-0.7	-2.4	80	2.7	-2.7	-0.5	333	0.4	0.2	-0.4	267	5.8	5.8	0.3	247	15.4	14.2	5.9	243	19.5	17.3	8.9	264	9.8	9.7	1.0			
5	34	2.2	-1.2	-1.8	88	2.6	-2.6	-0.1	13	1.8	-0.4	-1.8	272	7.0	7.0	-0.2	254	17.6	16.9	4.8	249	21.7	20.3	7.8	253	10.4	9.9	3.1			
6	24	2.2	-0.9	-2.0	70	2.0	-1.9	-0.7	315	0.8	0.6	-0.6	276	5.0	5.0	-0.5	255	17.1	16.5	4.3	246	20.2	18.5	8.1	251	11.1	10.5	3.7			
7	29	2.3	-1.1	-2.0	69	1.9	-1.8	-0.7	13	2.2	-0.5	-2.1	263	5.6	5.6	0.7	257	17.8	17.3	4.1	245	23.4	21.2	9.9	253	12.7	12.1	3.7			
8	21	3.3	-1.2	-3.1	80	2.2	-2.2	-0.4	297	0.4	0.4	-0.2	254	6.6	6.4	1.8	254	16.5	15.9	4.5	236	22.2	18.3	12.5	255	8.7	8.4	2.2			
9	33	3.8	-2.1	-3.2	83	3.1	-3.1	-0.4	326	1.1	0.6	-0.9	266	8.4	8.4	0.6	258	19.0	18.6	4.1	244	22.0	19.8	9.7	250	9.9	9.3	3.3			
10	24	3.7	-1.5	-3.4	88	3.5	-3.5	-0.1	7	0.8	-0.1	-0.8	263	5.4	5.4	0.7	248	16.3	15.1	6.1	242	20.0	17.6	9.4	238	7.0	6.0	3.7			
11	15	2.4	-0.6	-2.3	87	3.3	-3.3	-0.2	180	0.2	0.0	0.2	264	6.6	6.6	0.7	250	16.1	15.1	5.5	236	21.9	18.2	12.2	256	10.1	9.8	2.4			
12	13	2.3	-0.5	-2.2	85	3.5	-3.5	-0.3	90	1.8	-1.8	0.0	259	7.8	7.7	1.5	252	16.8	15.9	5.3	242	21.2	18.7	9.9	252	10.8	10.3	3.3			
13	23	2.6	-1.0	-2.4	73	2.7	-2.6	-0.8	37	1.0	-0.6	-0.8	267	8.4	8.4	0.4	259	17.1	16.8	3.3	244	22.8	20.5	9.9	258	9.8	9.6	2.1			
14	36	2.9	-1.7	-2.3	77	3.1	-3.0	-0.7	283	0.9	0.9	-0.2	276	8.0	7.9	-0.9	259	17.5	17.2	3.2	255	24.2	23.3	6.4	265	10.7	10.7	1.0			
15	343	1.0	0.3	-1.0	99	3.0	-3.0	0.5	360	0.3	0.0	-0.3	267	6.3	6.3	0.3	265	19.1	19.0	1.8	265	25.6	25.5	2.1	269	13.4	13.4	0.3			
16	24	2.7	-1.1	-2.5	96	3.0	-3.0	0.3	132	1.3	-1.0	0.9	258	6.6	6.5	1.4	266	19.2	19.2	1.2	255	24.8	23.9	6.6	255	10.8	10.4	2.8			
17	36	2.7	-1.6	-2.2	92	3.3	-3.3	0.1	135	1.0	-0.7	0.7	265	7.6	7.6	0.7	259	19.0	18.7	3.6	257	24.5	23.9	5.4	258	12.6	12.3	2.6			
18	15	2.4	-0.6	-2.3	90	3.4	-3.4	0.0	58	0.9	-0.8	-0.5	280	5.5	5.4	-1.0	272	19.8	19.8	-0.7	259	24.2	23.7	4.8	267	13.6	13.6	0.6			
19	27	3.3	-1.5	-2.9	71	2.8	-2.6	-0.9	90	0.2	-0.2	0.0	267	7.5	7.5	0.4	266	18.5	18.4	1.4	258	25.7	25.1	5.4	254	12.2	11.7	3.3			
20	29	1.8	-0.9	-1.6	88	2.9	-2.9	-0.1	30	1.6	-0.8	-1.4	274	7.9	7.9	-0.6	262	20.2	20.0	2.8	253	25.6	24.4	7.6	255	8.6	8.3	2.2			
21	29	2.3	-1.1	-2.0	90	3.4	-3.4	0.0	69	0.9	-0.8	-0.3	259	7.0	6.9	1.3	252	19.3	18.3	6.0	249	24.0	22.4	8.6	248	14.1	13.1	5.2			
22	16	3.3	-0.9	-3.2	73	2.4	-2.3	-0.7	315	0.8	0.6	-0.6	269	8.2	8.2	0.1	258	23.0	22.5	4.6	253	27.2	26.0	7.9	253	17.1	16.4	5.0			
23	32	4.0	-2.1	-3.4	69	2.6	-2.4	-0.9	282	2.5	2.4	-0.5	264	10.3	10.2	1.1	259	23.1	22.7	4.4	258	28.4	27.7	6.1	257	15.6	15.2	3.6			
24	15	2.0	-0.5	-1.9	61	1.3	-1.1	-0.6	283	2.6	2.5	-0.6	277	9.6	9.5	-1.1	262	22.2	22.0	2.9	257	26.6	26.0	5.8	268	16.6	16.6	0.7			
25	11	1.6	-0.3	-1.6	75	1.1	-1.1	-0.3	281	2.5	2.5	-0.5	263	9.5	9.4	1.2	259	23.4	23.0	4.5	253	29.8	28.6	8.5	262	18.1	17.9	2.4			
26	17	1.7	-0.5	-1.6	78	2.4	-2.3	-0.5	258	2.4	2.3	0.5	259	10.8	10.6	2.0	264	22.0	21.9	2.2	259	26.5	26.0	5.1	270	14.8	14.8	-0.1			
27	5	2.1	-0.2	-2.1	115	1.9	-1.7	0.8	255	1.6	1.5	0.4	264	9.2	9.2	0.9	255	22.8	22.0	6.0	253	27.9	26.7	8.0	261	16.9	16.7	2.6			
28	360	0.9	0.0	-0.9	104	0.8	-0.8	0.2	297	2.2	2.0	-1.0	279	9.7	9.6	-1.5	264	21.8	21.7	2.1	259	29.7	29.1	5.9	272	11.4	11.4	-0.4			
29	330	1.4	0.7	-1.2	105	1.1	-1.1	0.3	288	0.9	0.9	-0.3	265	11.0	11.0	1.0	263	24.1	23.9	3.0	254	26.4	25.3	7.4	273	12.6	12.6	-0.6			
30	321	1.3	0.8	-1.0	121	1.2	-1.0	0.6	295	1.9	1.7	-0.8	272	10.5	10.5	-0.3	264	23.9	23.7	2.7	252	25.6	24.4	7.7	261	9.9	9.8	1.5			
31	337	2.1	0.8	-1.9	51	0.6	-0.5	-0.4	242	1.9	1.7	0.9	260	11.5	11.3	1.9	257	24.7	24.0	5.7	255	28.9	27.9	7.4	251	13.6	12.9	4.4			

Daily Normals of Upper Air Winds (1971-2000)

277

NAGPUR

JANUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	37	2.1	-1.3	-1.7	297	2.5	2.2	-1.1	285	7.5	7.3	-1.9	275	15.8	15.7	-1.4	269	29.1	29.1	0.6	259	33.1	32.5	6.2	260	19.7	19.4	3.3			
2	36	1.9	-1.1	-1.5	309	2.6	2.0	-1.6	282	7.7	7.5	-1.6	275	16.7	16.6	-1.5	270	32.1	32.1	0.2	259	34.0	33.4	6.6	268	21.2	21.2	0.8			
3	45	1.8	-1.3	-1.3	328	2.8	1.5	-2.4	286	6.6	6.3	-1.8	280	14.4	14.2	-2.5	269	29.3	29.3	0.6	260	30.8	30.3	5.6	268	13.2	13.2	0.5			
4	60	1.4	-1.2	-0.7	339	2.2	0.8	-2.1	285	5.2	5.0	-1.3	273	14.8	14.8	-0.7	268	27.4	27.4	0.8	261	30.1	29.7	4.9	261	15.5	15.3	2.5			
5	111	1.4	-1.3	0.5	293	2.1	1.9	-0.8	290	6.7	6.3	-2.3	270	15.8	15.8	0.0	262	27.9	27.6	3.8	258	30.5	29.8	6.3	280	12.0	11.8	-2.1			
6	180	0.2	0.0	0.2	276	1.0	1.0	-0.1	283	6.5	6.3	-1.5	273	16.2	16.2	-0.9	259	29.6	29.0	5.9	259	31.2	30.6	5.9	270	18.6	18.6	0.0			
7	135	0.4	-0.3	0.3	256	1.2	1.2	0.3	272	5.9	5.9	-0.2	271	16.2	16.2	-0.4	262	27.7	27.4	3.8	266	34.0	33.9	2.5	261	16.4	16.2	2.5			
8	117	0.4	-0.4	0.2	273	2.1	2.1	-0.1	268	7.2	7.2	0.3	268	17.0	17.0	0.7	272	28.5	28.5	-0.8	267	31.0	31.0	1.5	265	18.1	18.0	1.5			
9	114	1.0	-0.9	0.4	281	1.5	1.5	-0.3	271	8.4	8.4	-0.1	269	17.5	17.5	0.4	266	28.4	28.3	1.9	265	32.1	32.0	2.8	266	14.4	14.4	1.0			
10	153	1.1	-0.5	1.0	254	1.5	1.4	0.4	272	7.5	7.5	-0.3	266	16.9	16.9	1.2	263	28.7	28.5	3.4	261	31.8	31.4	4.9	263	17.7	17.6	2.3			
11	189	0.6	0.1	0.6	244	2.5	2.3	1.1	268	7.8	7.8	0.3	270	18.1	18.1	-0.1	264	31.8	31.6	3.6	257	34.4	33.6	7.6	264	20.2	20.1	2.2			
12	211	1.2	0.6	1.0	263	2.4	2.4	0.3	273	9.0	9.0	-0.5	278	19.1	18.9	-2.5	269	31.0	31.0	0.5	255	33.1	32.0	8.4	271	18.6	18.6	-0.2			
13	288	0.9	0.9	-0.3	279	2.4	2.4	-0.4	281	8.1	7.9	-1.6	270	17.5	17.5	0.0	271	29.5	29.5	-0.5	257	34.8	33.9	7.9	260	22.0	21.7	3.7			
14	255	1.1	1.1	0.3	270	2.6	2.6	0.0	275	7.4	7.4	-0.6	275	17.5	17.4	-1.6	271	32.1	32.1	-0.5	265	36.1	36.0	2.9	263	22.8	22.6	2.7			
15	209	2.5	1.2	2.2	264	2.7	2.7	0.3	272	8.6	8.6	-0.3	272	18.6	18.6	-0.7	270	33.8	33.8	-0.2	267	33.4	33.3	2.0	266	20.8	20.7	1.6			
16	45	0.1	-0.1	-0.1	273	2.0	2.0	-0.1	285	9.0	8.7	-2.3	271	17.8	17.8	-0.3	266	32.4	32.3	2.1	256	32.1	31.1	7.9	253	17.1	16.3	5.1			
17	9	1.8	-0.3	-1.8	284	2.5	2.4	-0.6	284	7.6	7.4	-1.8	273	18.6	18.6	-1.1	269	32.8	32.8	0.5	262	31.4	31.1	4.4	263	21.1	21.0	2.5			
18	33	1.7	-0.9	-1.4	275	2.2	2.2	-0.2	280	7.8	7.7	-1.4	278	17.6	17.4	-2.5	270	30.6	30.6	0.0	264	31.2	31.0	3.4	269	18.4	18.4	0.4			
19	189	0.6	0.1	0.6	258	2.4	2.3	0.5	280	7.8	7.7	-1.4	278	16.9	16.7	-2.3	269	31.1	31.1	0.5	262	32.2	31.9	4.3	274	21.4	21.3	-1.6			
20	321	0.6	0.4	-0.5	272	2.3	2.3	-0.1	276	8.1	8.1	-0.9	275	18.8	18.7	-1.8	266	32.5	32.4	2.1	262	33.2	32.9	4.4	259	20.0	19.7	3.7			
21	5	1.1	-0.1	-1.1	280	1.7	1.7	-0.3	277	9.4	9.3	-1.2	279	19.5	19.3	-3.0	267	30.0	30.0	1.4	258	33.3	32.6	7.0	257	22.9	22.3	5.1			
22	81	0.6	-0.6	-0.1	268	2.6	2.6	0.1	283	8.2	8.0	-1.9	272	17.7	17.7	-0.5	267	30.9	30.9	1.4	254	32.4	31.1	9.1	263	20.6	20.4	2.5			
23	90	0.1	-0.1	0.0	285	2.7	2.6	-0.7	292	7.5	7.0	-2.8	276	16.8	16.7	-1.8	268	28.9	28.9	1.0	262	32.8	32.5	4.3	253	13.2	12.6	3.8			
24	65	1.9	-1.7	-0.8	294	2.7	2.5	-1.1	285	7.7	7.4	-2.0	276	16.3	16.2	-1.8	274	27.6	27.5	-1.7	259	30.1	29.5	5.8	258	15.0	14.7	3.1			
25	86	1.3	-1.3	-0.1	234	1.7	1.4	1.0	287	7.1	6.8	-2.1	274	15.6	15.6	-1.2	270	24.9	24.9	0.0	264	29.2	29.0	3.2	261	19.5	19.3	3.0			
26	82	1.4	-1.4	-0.2	275	2.1	2.1	-0.2	284	6.8	6.6	-1.6	271	16.2	16.2	-0.3	270	28.6	28.6	0.2	258	29.5	28.8	6.2	254	17.0	16.3	4.8			
27	97	1.6	-1.6	0.2	254	1.9	1.8	0.5	279	7.3	7.2	-1.2	273	16.5	16.5	-0.9	269	28.4	28.4	0.7	255	31.0	29.9	8.0	258	19.2	18.8	4.1			
28	162	0.6	-0.2	0.6	272	2.4	2.4	-0.1	288	8.2	7.8	-2.6	278	16.7	16.6	-2.2	275	29.3	29.2	-2.4	263	29.9	29.7	3.5	272	18.7	18.7	-0.7			
29	124	0.7	-0.6	0.4	267	2.0	2.0	0.1	286	8.5	8.2	-2.4	276	15.5	15.4	-1.6	273	28.9	28.9	-1.6	266	31.5	31.4	2.3	271	20.0	20.0	-0.4			
30	139	1.1	-0.7	0.8	232	3.1	2.4	1.9	278	8.7	8.6	-1.2	276	18.5	18.4	-1.9	269	30.9	30.9	0.8	264	34.8	34.6	3.9	263	18.2	18.1	2.2			
31	225	1.1	0.8	0.8	249	4.2	3.9	1.5	279	9.2	9.1	-1.5	278	18.2	18.0	-2.4	274	30.8	30.7	-2.4	268	32.2	32.2	1.3	259	18.6	18.2	3.7			

Daily Normals of Upper Air Winds (1971-2000)

NAGPUR

FEBRUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	189	1.9	0.3	1.9	249	2.5	2.3	0.9	278	9.7	9.6	-1.4	273	17.5	17.5	-0.9	268	29.9	29.9	1.0	271	32.1	32.1	-0.6	273	18.7	18.7	-0.9
2	216	1.4	0.8	1.1	259	2.1	2.1	0.4	279	8.1	8.0	-1.2	272	18.2	18.2	-0.6	272	30.7	30.7	-0.9	267	35.9	35.9	1.6	261	21.2	20.9	3.4
3	162	0.9	-0.3	0.9	253	3.0	2.9	0.9	278	9.6	9.5	-1.4	274	18.5	18.5	-1.2	270	30.5	30.5	-0.1	271	33.2	33.2	-0.4	267	21.9	21.9	1.2
4	256	0.4	0.4	0.1	259	2.6	2.6	0.5	274	7.9	7.9	-0.6	271	19.3	19.3	-0.3	271	32.1	32.1	-0.3	274	33.6	33.5	-2.6	267	22.2	22.2	1.3
5	270	0.4	0.4	0.0	287	3.4	3.2	-1.0	273	9.9	9.9	-0.5	281	17.2	16.9	-3.4	274	31.9	31.8	-2.1	267	35.5	35.5	1.6	272	23.4	23.4	-0.8
6	45	0.7	-0.5	-0.5	278	2.2	2.2	-0.3	285	8.2	7.9	-2.1	279	18.0	17.8	-2.9	278	29.3	29.0	-4.0	266	30.4	30.3	2.2	280	14.5	14.3	-2.6
7	63	0.9	-0.8	-0.4	261	1.8	1.8	0.3	283	7.8	7.6	-1.7	280	15.8	15.6	-2.8	271	27.2	27.2	-0.4	271	28.3	28.3	-0.6	272	19.6	19.6	-0.8
8	278	1.5	1.5	-0.2	272	2.5	2.5	-0.1	277	7.9	7.8	-1.0	282	16.4	16.0	-3.5	269	27.3	27.3	0.7	263	31.5	31.3	3.6	267	17.9	17.9	0.8
9	13	1.3	-0.3	-1.3	263	1.6	1.6	0.2	285	7.7	7.4	-2.0	286	16.3	15.7	-4.4	280	25.6	25.2	-4.5	275	27.7	27.6	-2.2	268	14.2	14.2	0.5
10	21	1.4	-0.5	-1.3	273	2.1	2.1	-0.1	281	7.6	7.4	-1.5	280	17.4	17.1	-3.1	279	27.0	26.6	-4.4	275	30.4	30.3	-2.7	277	17.3	17.2	-2.1
11	310	0.8	0.6	-0.5	263	2.3	2.3	0.3	273	6.4	6.4	-0.3	283	16.1	15.7	-3.7	279	27.7	27.3	-4.4	273	28.6	28.6	-1.3	259	18.2	17.8	3.6
12	83	1.6	-1.6	-0.2	251	2.1	2.0	0.7	275	7.6	7.6	-0.7	276	16.9	16.8	-1.9	275	24.9	24.8	-2.1	271	31.1	31.1	-0.8	265	18.5	18.4	1.6
13	162	0.3	-0.1	0.3	248	2.9	2.7	1.1	266	7.8	7.8	0.5	272	16.8	16.8	-0.5	268	30.9	30.9	0.9	266	32.0	31.9	2.4	260	17.4	17.1	3.0
14	360	0.5	0.0	-0.5	247	3.0	2.8	1.2	260	8.7	8.6	1.5	268	17.8	17.8	0.6	261	32.0	31.6	4.8	258	31.5	30.8	6.6	267	16.9	16.9	1.0
15	225	0.1	0.1	0.1	261	2.0	2.0	0.3	265	7.6	7.6	0.7	272	17.1	17.1	-0.5	269	31.4	31.4	0.4	264	31.1	30.9	3.1	267	22.0	22.0	1.0
16	231	1.4	1.1	0.9	254	2.6	2.5	0.7	265	8.7	8.7	0.7	271	18.9	18.9	-0.2	263	31.3	31.0	4.0	256	30.0	29.1	7.4	255	18.3	17.7	4.7
17	263	2.3	2.3	0.3	251	2.1	2.0	0.7	263	8.7	8.6	1.0	266	18.7	18.7	1.3	265	32.2	32.1	2.6	254	34.3	33.0	9.5	258	19.7	19.3	4.1
18	264	1.8	1.8	0.2	249	2.6	2.4	0.9	267	9.1	9.1	0.5	267	20.5	20.5	1.1	265	30.9	30.8	2.7	264	28.4	28.3	2.8	256	15.0	14.6	3.6
19	232	2.3	1.8	1.4	240	2.8	2.4	1.4	271	8.1	8.1	-0.1	273	19.8	19.8	-0.9	263	29.8	29.6	3.5	257	32.2	31.4	7.2	258	21.2	20.7	4.5
20	305	1.6	1.3	-0.9	268	2.5	2.5	0.1	271	7.9	7.9	-0.1	270	18.0	18.0	0.0	263	31.5	31.3	3.6	253	33.5	32.1	9.6	263	17.0	16.9	2.1
21	245	2.1	1.9	0.9	259	2.6	2.6	0.5	278	8.1	8.0	-1.1	271	19.4	19.4	-0.5	267	34.2	34.1	1.9	259	31.0	30.5	5.7	267	18.3	18.3	0.9
22	263	2.5	2.5	0.3	287	2.4	2.3	-0.7	274	7.2	7.2	-0.5	275	17.3	17.2	-1.6	274	27.5	27.4	-2.0	259	33.7	33.1	6.4	268	22.6	22.6	0.7
23	45	0.6	-0.4	-0.4	250	1.5	1.4	0.5	277	6.6	6.6	-0.8	274	17.3	17.3	-1.1	271	26.9	26.9	-0.4	261	31.7	31.3	5.1	271	17.1	17.1	-0.2
24	225	0.8	0.6	0.6	270	2.2	2.2	0.0	270	6.8	6.8	0.0	276	16.3	16.2	-1.8	273	27.5	27.5	-1.6	273	31.5	31.5	-1.5	270	18.0	18.0	0.0
25	241	2.5	2.2	1.2	265	2.5	2.5	0.2	275	6.7	6.7	-0.6	276	16.9	16.8	-1.7	271	27.1	27.1	-0.4	264	30.2	30.0	3.2	261	18.4	18.2	2.9
26	259	2.0	2.0	0.4	263	3.1	3.1	0.4	270	7.0	7.0	0.0	280	15.8	15.5	-2.8	271	26.3	26.3	-0.4	267	29.1	29.1	1.3	269	14.5	14.5	0.3
27	270	1.1	1.1	0.0	260	2.9	2.9	0.5	269	8.2	8.2	0.1	272	16.1	16.1	-0.7	266	30.8	30.7	2.1	262	31.0	30.7	4.2	260	20.1	19.8	3.6
28	53	0.5	-0.4	-0.3	258	2.9	2.8	0.6	276	7.0	7.0	-0.7	276	15.2	15.1	-1.5	271	29.4	29.4	-0.5	266	28.4	28.3	2.2	266	17.5	17.5	1.1
29	270	2.2	2.2	0.0	268	3.8	3.8	0.1	298	7.3	6.5	-3.4	283	15.4	15.0	-3.4	267	27.2	27.2	1.2	250	23.3	21.8	8.1	271	12.2	12.2	-0.2

Daily Normals of Upper Air Winds (1971-2000)

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NAGPUR

MARCH

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	22	0.5	-0.2	-0.5	281	2.5	2.5	-0.5	272	7.6	7.6	-0.3	278	15.7	15.5	-2.2	273	28.0	28.0	-1.4	268	29.3	29.3	1.2	262	14.8	14.7	2.1			
2	341	2.1	0.7	-2.0	300	2.2	1.9	-1.1	286	7.3	7.0	-2.0	283	15.0	14.6	-3.5	272	27.1	27.1	-1.1	270	28.1	28.1	0.2	267	19.4	19.4	0.9			
3	37	1.0	-0.6	-0.8	297	1.8	1.6	-0.8	290	7.2	6.7	-2.5	285	13.2	12.8	-3.4	276	24.3	24.2	-2.5	261	27.5	27.2	4.2	267	17.6	17.6	0.9			
4	188	0.7	0.1	0.7	263	1.6	1.6	0.2	273	5.6	5.6	-0.3	274	13.7	13.7	-0.9	265	25.2	25.1	2.2	258	28.5	27.9	5.7	261	15.1	14.9	2.3			
5	180	0.8	0.0	0.8	254	2.5	2.4	0.7	264	6.6	6.6	0.7	272	16.4	16.4	-0.6	271	27.5	27.5	-0.7	262	29.1	28.8	4.3	259	16.3	16.0	3.1			
6	257	1.3	1.3	0.3	268	2.9	2.9	0.1	269	6.6	6.6	0.1	275	15.9	15.8	-1.5	267	27.4	27.4	1.4	263	30.7	30.5	3.8	260	17.1	16.9	2.9			
7	27	0.4	-0.2	-0.4	277	2.3	2.3	-0.3	276	6.2	6.2	-0.7	275	13.6	13.6	-1.1	273	22.7	22.7	-1.3	270	28.3	28.3	-0.1	273	14.8	14.8	-0.8			
8	254	0.7	0.7	0.2	246	2.7	2.5	1.1	277	7.2	7.1	-0.9	272	14.0	14.0	-0.4	269	27.7	27.7	0.5	269	29.1	29.1	0.3	272	13.7	13.7	-0.5			
9	315	1.4	1.0	-1.0	249	2.2	2.1	0.8	275	6.1	6.1	-0.5	274	14.7	14.7	-1.0	268	28.2	28.2	0.8	264	30.3	30.1	3.4	266	19.7	19.7	1.3			
10	225	1.3	0.9	0.9	239	2.7	2.3	1.4	266	5.8	5.8	0.4	264	14.2	14.1	1.6	266	24.1	24.0	1.8	262	28.6	28.3	3.9	268	13.3	13.3	0.5			
11	37	0.5	-0.3	-0.4	248	2.4	2.2	0.9	270	7.0	7.0	0.0	264	15.6	15.5	1.5	267	26.5	26.5	1.4	261	26.3	26.0	4.1	268	16.7	16.7	0.7			
12	248	3.1	2.9	1.2	272	2.4	2.4	-0.1	276	7.7	7.7	-0.8	277	15.3	15.2	-1.8	266	27.4	27.3	1.8	264	32.6	32.4	3.5	272	18.2	18.2	-0.6			
13	282	3.3	3.2	-0.7	292	2.9	2.7	-1.1	271	7.6	7.6	-0.1	287	14.9	14.2	-4.4	273	25.1	25.1	-1.5	270	28.2	28.2	-0.2	263	14.5	14.4	1.8			
14	259	0.5	0.5	0.1	250	2.7	2.5	0.9	263	6.1	6.1	0.7	280	14.2	14.0	-2.4	277	22.4	22.2	-2.8	268	26.6	26.6	0.9	270	15.7	15.7	0.0			
15	236	0.4	0.3	0.2	245	2.3	2.1	1.0	272	6.7	6.7	-0.2	282	13.0	12.7	-2.7	275	22.6	22.5	-1.9	269	23.7	23.7	0.4	280	9.6	9.4	-1.7			
16	256	0.8	0.8	0.2	263	2.5	2.5	0.3	272	6.1	6.1	-0.2	279	13.5	13.3	-2.1	274	22.2	22.2	-1.4	266	27.4	27.3	1.9	268	12.2	12.2	0.4			
17	272	2.7	2.7	-0.1	270	2.4	2.4	0.0	275	5.8	5.8	-0.5	279	13.1	12.9	-2.0	270	23.6	23.6	0.0	264	28.1	27.9	2.9	263	15.0	14.9	1.7			
18	307	2.6	2.1	-1.6	264	3.1	3.1	0.3	266	6.4	6.4	0.4	275	14.6	14.5	-1.3	268	24.1	24.1	0.9	261	28.9	28.5	4.5	260	13.6	13.4	2.3			
19	235	2.1	1.7	1.2	263	2.6	2.6	0.3	269	6.5	6.5	0.1	283	13.6	13.2	-3.1	271	25.1	25.1	-0.6	267	27.2	27.2	1.4	269	17.4	17.4	0.2			
20	282	1.9	1.9	-0.4	270	4.0	4.0	0.0	272	6.3	6.3	-0.2	279	14.7	14.5	-2.3	272	23.5	23.5	-0.9	264	26.0	25.8	2.9	280	15.1	14.9	-2.5			
21	276	2.9	2.9	-0.3	268	2.3	2.3	0.1	273	5.9	5.9	-0.3	279	13.1	12.9	-2.0	273	22.8	22.8	-1.2	268	25.1	25.1	0.9	276	15.3	15.2	-1.6			
22	252	2.9	2.8	0.9	258	3.4	3.3	0.7	265	6.6	6.6	0.6	278	12.2	12.1	-1.7	277	21.8	21.7	-2.5	271	29.1	29.1	-0.5	270	16.5	16.5	0.1			
23	270	1.8	1.8	0.0	272	3.2	3.2	-0.1	277	6.5	6.5	-0.8	278	12.4	12.3	-1.7	274	23.7	23.6	-1.8	262	27.0	26.7	3.9	273	14.1	14.1	-0.8			
24	321	2.1	1.3	-1.6	272	3.0	3.0	-0.1	266	5.5	5.5	0.4	277	13.0	12.9	-1.6	266	22.5	22.4	1.6	260	29.5	29.0	5.2	255	17.3	16.7	4.4			
25	316	3.0	2.1	-2.2	272	2.7	2.7	-0.1	271	5.3	5.3	-0.1	288	11.6	11.0	-3.6	286	21.2	20.3	-6.0	270	29.4	29.4	-0.1	263	13.2	13.1	1.6			
26	310	3.9	3.0	-2.5	288	2.9	2.8	-0.9	275	6.4	6.4	-0.6	298	12.8	11.3	-6.1	281	22.7	22.3	-4.2	270	29.9	29.9	-0.1	276	15.0	14.9	-1.6			
27	341	2.1	0.7	-2.0	290	3.0	2.8	-1.0	286	5.3	5.1	-1.5	284	10.4	10.1	-2.5	279	22.3	22.0	-3.5	264	25.8	25.7	2.7	274	14.6	14.6	-0.9			
28	326	2.2	1.2	-1.8	278	2.1	2.1	-0.3	287	5.0	4.8	-1.5	289	10.5	9.9	-3.5	283	20.1	19.6	-4.6	262	25.4	25.2	3.5	271	11.8	11.8	-0.3			
29	270	1.4	1.4	0.0	272	3.1	3.1	-0.1	282	4.9	4.8	-1.0	285	11.0	10.6	-2.8	283	21.0	20.5	-4.6	257	27.6	26.9	6.3	264	11.3	11.2	1.2			
30	335	1.9	0.8	-1.7	282	3.0	2.9	-0.6	285	4.6	4.4	-1.2	277	9.3	9.2	-1.1	272	21.4	21.4	-0.6	264	24.0	23.9	2.6	251	12.8	12.1	4.2			
31	309	1.9	1.5	-1.2	279	3.3	3.3	-0.5	282	5.6	5.5	-1.2	272	11.3	11.3	-0.3	265	25.3	25.2	2.3	266	26.5	26.4	1.7	283	15.2	14.8	-3.3			

Daily Normals of Upper Air Winds (1971-2000)

NAGPUR

APRIL

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	266	1.5	1.5	0.1	275	3.6	3.6	-0.3	279	5.2	5.1	-0.8	279	10.5	10.4	-1.7	267	23.0	23.0	1.1	264	28.4	28.3	2.8	273	9.8	9.8	-0.5			
2	263	1.6	1.6	0.2	270	3.0	3.0	0.0	272	5.3	5.3	-0.2	275	11.5	11.5	-1.0	269	26.2	26.2	0.5	265	26.6	26.5	2.2	276	13.6	13.5	-1.3			
3	162	1.3	-0.4	1.2	259	3.6	3.5	0.7	262	4.8	4.7	0.7	274	11.4	11.4	-0.7	266	24.6	24.5	1.6	262	28.6	28.3	4.0	276	10.2	10.2	-1.0			
4	209	1.8	0.9	1.6	259	3.3	3.2	0.6	274	4.9	4.9	-0.3	271	11.7	11.7	-0.3	267	25.3	25.3	1.5	262	29.0	28.8	3.8	255	9.4	9.1	2.4			
5	288	1.6	1.5	-0.5	270	3.4	3.4	0.0	272	5.7	5.7	-0.2	269	10.8	10.8	0.1	269	22.5	22.5	0.4	256	28.6	27.7	7.0	269	10.2	10.2	0.2			
6	247	3.4	3.1	1.3	238	2.6	2.2	1.4	274	5.2	5.2	-0.4	281	10.3	10.1	-2.0	282	22.5	22.0	-4.7	277	26.8	26.6	-3.3	264	11.4	11.3	1.2			
7	270	1.7	1.7	0.0	258	3.4	3.3	0.7	278	5.6	5.5	-0.8	283	11.2	10.9	-2.6	275	23.6	23.5	-2.1	270	27.3	27.3	0.1	274	9.6	9.6	-0.6			
8	268	3.3	3.3	0.1	283	4.7	4.6	-1.1	278	5.3	5.3	-0.7	279	10.9	10.8	-1.8	278	25.6	25.4	-3.5	256	28.0	27.2	6.6	260	14.9	14.7	2.5			
9	253	3.4	3.3	1.0	283	3.7	3.6	-0.8	271	5.3	5.3	-0.1	277	11.0	10.9	-1.4	263	23.4	23.2	2.8	255	28.7	27.8	7.3	262	17.0	16.8	2.4			
10	219	1.9	1.2	1.5	266	2.9	2.9	0.2	274	5.9	5.9	-0.4	282	10.8	10.6	-2.2	275	21.6	21.5	-1.7	265	26.8	26.7	2.4	272	10.5	10.5	-0.4			
11	255	1.6	1.5	0.4	265	3.3	3.3	0.3	287	4.8	4.6	-1.4	285	9.9	9.6	-2.5	276	22.7	22.6	-2.5	272	24.6	24.6	-1.0	264	11.9	11.8	1.2			
12	270	3.6	3.6	0.0	273	3.7	3.7	-0.2	276	4.5	4.5	-0.5	283	10.4	10.1	-2.4	278	21.1	20.9	-3.1	281	22.5	22.1	-4.2	271	7.7	7.7	-0.1			
13	283	3.2	3.1	-0.7	277	3.9	3.9	-0.5	278	4.2	4.2	-0.6	281	10.3	10.1	-2.0	265	20.9	20.8	1.8	260	26.3	25.9	4.7	268	14.4	14.4	0.5			
14	274	1.6	1.6	-0.1	284	2.9	2.8	-0.7	281	4.4	4.3	-0.8	275	10.8	10.8	-1.0	265	21.2	21.1	2.0	259	25.8	25.4	4.8	261	8.6	8.5	1.3			
15	291	1.9	1.8	-0.7	268	3.5	3.5	0.1	269	5.4	5.4	0.1	278	10.7	10.6	-1.4	266	21.4	21.3	1.5	257	24.5	23.9	5.3	254	7.1	6.8	2.0			
16	298	2.1	1.9	-1.0	275	3.7	3.7	-0.3	271	5.6	5.6	-0.1	279	9.7	9.6	-1.5	264	19.5	19.4	2.1	256	22.8	22.1	5.6	261	13.4	13.3	2.0			
17	259	3.3	3.2	0.6	288	2.8	2.7	-0.9	278	5.6	5.5	-0.8	288	9.6	9.1	-2.9	267	18.4	18.4	1.0	254	23.7	22.8	6.6	282	10.2	10.0	-2.2			
18	276	1.0	1.0	-0.1	280	3.6	3.5	-0.6	287	5.8	5.5	-1.7	290	9.7	9.1	-3.4	263	17.8	17.7	2.2	261	24.6	24.3	4.0	266	9.2	9.2	0.6			
19	270	0.9	0.9	0.0	285	2.4	2.3	-0.6	294	4.4	4.0	-1.8	288	8.9	8.5	-2.7	275	17.2	17.1	-1.5	261	22.6	22.3	3.7	269	7.9	7.9	0.2			
20	292	1.8	1.7	-0.7	287	2.8	2.7	-0.8	288	4.0	3.8	-1.2	290	8.3	7.8	-2.8	271	16.7	16.7	-0.4	264	20.5	20.4	2.3	258	9.4	9.2	2.0			
21	266	2.6	2.6	0.2	283	3.2	3.1	-0.7	283	4.4	4.3	-1.0	274	7.3	7.3	-0.5	266	16.9	16.9	1.3	258	22.7	22.2	4.8	257	10.4	10.1	2.4			
22	344	2.9	0.8	-2.8	301	2.6	2.2	-1.3	289	3.7	3.5	-1.2	273	7.2	7.2	-0.4	260	20.3	20.0	3.4	254	25.4	24.4	7.0	260	9.0	8.9	1.6			
23	257	2.7	2.6	0.6	277	3.5	3.5	-0.4	279	4.7	4.6	-0.7	281	8.4	8.2	-1.6	264	17.9	17.8	2.0	256	21.3	20.7	5.2	262	7.5	7.4	1.0			
24	286	3.2	3.1	-0.9	276	3.9	3.9	-0.4	286	4.6	4.4	-1.3	289	7.3	6.9	-2.4	263	18.7	18.5	2.4	259	23.9	23.4	4.7	255	11.6	11.2	3.0			
25	263	2.5	2.5	0.3	282	3.8	3.7	-0.8	285	5.0	4.8	-1.3	296	7.6	6.8	-3.3	266	16.8	16.7	1.3	262	20.1	19.9	2.8	263	4.6	4.6	0.6			
26	313	2.6	1.9	-1.8	291	2.6	2.4	-0.9	303	3.7	3.1	-2.0	300	6.9	6.0	-3.5	270	14.3	14.3	-0.1	272	16.9	16.9	-0.5	272	5.2	5.2	-0.2			
27	277	2.5	2.5	-0.3	294	3.6	3.3	-1.5	303	4.9	4.1	-2.7	303	7.3	6.1	-4.0	283	15.1	14.7	-3.3	274	17.2	17.2	-1.3	274	5.1	5.1	-0.4			
28	313	3.4	2.5	-2.3	306	3.4	2.8	-2.0	297	3.9	3.5	-1.8	296	7.1	6.4	-3.1	270	15.1	15.1	-0.1	250	18.0	16.9	6.1	249	8.1	7.6	2.9			
29	290	2.7	2.5	-0.9	298	3.4	3.0	-1.6	301	4.3	3.7	-2.2	303	6.2	5.2	-3.4	276	16.3	16.2	-1.6	260	19.9	19.6	3.3	221	2.1	1.4	1.6			
30	295	1.9	1.7	-0.8	299	3.5	3.1	-1.7	295	4.7	4.3	-2.0	302	6.8	5.8	-3.6	268	16.6	16.6	0.5	257	18.5	18.0	4.2	199	5.9	1.9	5.6			

Daily Normals of Upper Air Winds (1971-2000)

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NAGPUR

MAY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	298	2.7	2.4	-1.3	281	2.6	2.6	-0.5	290	4.1	3.9	-1.4	300	7.7	6.7	-3.8	266	16.7	16.6	1.3	262	18.3	18.1	2.5	217	1.5	0.9	1.2			
2	306	3.6	2.9	-2.1	302	3.4	2.9	-1.8	294	4.4	4.0	-1.8	287	7.1	6.8	-2.1	268	17.0	17.0	0.6	264	18.1	18.0	1.9	216	4.3	2.5	3.5			
3	306	2.7	2.2	-1.6	303	4.0	3.4	-2.2	281	4.2	4.1	-0.8	289	7.5	7.1	-2.5	273	16.2	16.2	-0.8	266	17.8	17.8	1.3	209	6.5	3.1	5.7			
4	318	2.5	1.7	-1.9	311	3.0	2.3	-2.0	299	4.3	3.8	-2.1	297	7.2	6.4	-3.2	274	14.5	14.5	-1.0	260	17.6	17.3	3.2	201	2.8	1.0	2.6			
5	312	3.9	2.9	-2.6	309	4.0	3.1	-2.5	296	4.1	3.7	-1.8	299	7.0	6.1	-3.4	264	13.9	13.8	1.5	256	16.6	16.1	4.0	205	3.3	1.4	3.0			
6	299	2.9	2.5	-1.4	310	3.9	3.0	-2.5	302	4.5	3.8	-2.4	309	6.8	5.3	-4.3	277	12.9	12.8	-1.5	263	15.5	15.4	1.9	227	2.5	1.8	1.7			
7	282	2.5	2.4	-0.5	284	3.8	3.7	-0.9	290	4.7	4.4	-1.6	303	6.7	5.6	-3.7	264	13.3	13.2	1.4	251	15.6	14.7	5.2	217	2.1	1.3	1.7			
8	304	2.7	2.2	-1.5	313	3.4	2.5	-2.3	305	4.0	3.3	-2.3	295	5.3	4.8	-2.2	268	13.0	13.0	0.5	259	14.0	13.7	2.7	233	0.5	0.4	0.3			
9	286	2.6	2.5	-0.7	292	3.5	3.2	-1.3	298	4.5	4.0	-2.1	301	7.2	6.2	-3.7	268	15.0	15.0	0.5	259	13.2	13.0	2.5	94	1.6	-1.6	0.1			
10	286	3.5	3.4	-1.0	277	3.8	3.8	-0.5	310	4.5	3.4	-2.9	290	7.5	7.0	-2.6	267	16.2	16.2	0.8	254	13.1	12.6	3.6	304	0.4	0.3	-0.2			
11	321	2.2	1.4	-1.7	302	2.2	1.9	-1.2	293	4.4	4.1	-1.7	297	7.6	6.8	-3.5	270	14.6	14.6	0.0	251	14.6	13.8	4.7	160	5.0	-1.7	4.7			
12	326	0.7	0.4	-0.6	303	2.4	2.0	-1.3	313	3.8	2.8	-2.6	316	6.0	4.2	-4.3	279	10.0	9.9	-1.6	266	12.1	12.1	0.8	126	2.2	-1.8	1.3			
13	278	2.7	2.7	-0.4	307	2.6	2.1	-1.6	310	5.3	4.1	-3.4	317	6.9	4.7	-5.1	287	8.8	8.4	-2.6	258	7.9	7.7	1.6	190	2.2	0.4	2.2			
14	293	2.6	2.4	-1.0	293	3.3	3.0	-1.3	304	3.4	2.8	-1.9	308	5.7	4.5	-3.5	269	9.8	9.8	0.2	257	11.0	10.7	2.4	117	4.2	-3.8	1.9			
15	301	4.9	4.2	-2.5	307	3.8	3.0	-2.3	306	4.7	3.8	-2.8	311	6.3	4.8	-4.1	260	10.2	10.0	1.8	253	9.6	9.2	2.9	116	7.0	-6.3	3.1			
16	296	3.2	2.9	-1.4	299	3.3	2.9	-1.6	309	5.0	3.9	-3.2	308	6.8	5.3	-4.2	269	7.6	7.6	0.1	252	10.8	10.3	3.4	143	3.9	-2.3	3.1			
17	319	2.3	1.5	-1.7	308	3.6	2.8	-2.2	303	5.1	4.3	-2.8	305	7.1	5.8	-4.1	271	12.3	12.3	-0.2	253	10.2	9.7	3.0	138	2.7	-1.8	2.0			
18	303	6.0	5.0	-3.3	302	5.7	4.8	-3.0	309	5.8	4.5	-3.7	307	7.8	6.2	-4.7	276	11.2	11.1	-1.2	252	11.1	10.6	3.4	180	2.1	0.0	2.1			
19	273	3.9	3.9	-0.2	298	4.4	3.9	-2.1	301	5.0	4.3	-2.6	309	6.3	4.9	-4.0	268	9.6	9.6	0.3	256	9.2	8.9	2.3	116	3.7	-3.3	1.6			
20	310	2.3	1.8	-1.5	300	3.0	2.6	-1.5	311	4.1	3.1	-2.7	297	5.1	4.5	-2.3	262	8.9	8.8	1.3	245	10.9	9.9	4.6	109	4.6	-4.4	1.5			
21	303	5.0	4.2	-2.7	303	3.7	3.1	-2.0	307	4.0	3.2	-2.4	299	5.0	4.4	-2.4	259	7.8	7.7	1.5	236	10.8	8.9	6.1	88	3.3	-3.3	-0.1			
22	326	4.6	2.6	-3.8	311	3.8	2.9	-2.5	322	4.6	2.8	-3.6	314	7.3	5.2	-5.1	258	7.9	7.7	1.7	234	8.0	6.5	4.7	137	2.1	-1.4	1.5			
23	308	3.4	2.7	-2.1	314	3.6	2.6	-2.5	320	4.5	2.9	-3.5	314	6.0	4.3	-4.2	271	8.0	8.0	-0.1	229	9.1	6.9	5.9	121	5.2	-4.5	2.7			
24	282	3.8	3.7	-0.8	310	4.5	3.4	-2.9	315	4.9	3.5	-3.5	329	5.1	2.6	-4.4	261	8.8	8.7	1.4	229	9.9	7.5	6.5	108	7.1	-6.8	2.2			
25	299	3.3	2.9	-1.6	311	3.3	2.5	-2.2	308	4.7	3.7	-2.9	334	5.9	2.6	-5.3	256	4.1	4.0	1.0	233	8.3	6.6	5.0	123	4.9	-4.1	2.7			
26	301	2.9	2.5	-1.5	322	3.4	2.1	-2.7	319	3.8	2.5	-2.9	327	5.1	2.8	-4.3	267	5.3	5.3	0.3	234	4.4	3.6	2.6	108	7.5	-7.1	2.3			
27	254	4.1	3.9	1.1	299	4.3	3.8	-2.1	320	4.7	3.0	-3.6	326	4.6	2.6	-3.8	277	4.3	4.3	-0.5	235	4.9	4.0	2.8	104	9.4	-9.1	2.3			
28	265	4.6	4.6	0.4	300	3.2	2.8	-1.6	298	4.5	4.0	-2.1	323	4.5	2.7	-3.6	255	5.0	4.8	1.3	231	5.5	4.3	3.5	100	6.8	-6.7	1.2			
29	309	4.6	3.6	-2.9	294	3.5	3.2	-1.4	289	4.0	3.8	-1.3	301	4.7	4.0	-2.4	254	5.7	5.5	1.6	219	7.5	4.7	5.8	130	6.9	-5.3	4.4			
30	261	4.4	4.3	0.7	292	3.7	3.4	-1.4	314	3.5	2.5	-2.4	287	4.7	4.5	-1.4	242	7.1	6.3	3.3	219	7.0	4.4	5.5	109	8.2	-7.7	2.7			
31	282	3.4	3.3	-0.7	297	2.8	2.5	-1.3	303	3.3	2.8	-1.8	294	3.9	3.6	-1.6	239	4.8	4.1	2.5	205	6.1	2.6	5.5	106	10.2	-9.8	2.9			

Daily Normals of Upper Air Winds (1971-2000)

NAGPUR

JUNE

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	342	4.3	1.3	-4.1	323	4.0	2.4	-3.2	320	3.1	2.0	-2.4	291	4.9	4.6	-1.8	242	5.8	5.1	2.7	192	6.0	1.3	5.9	112	11.7	-10.8	4.4
2	333	3.9	1.8	-3.5	301	2.7	2.3	-1.4	303	2.4	2.0	-1.3	298	2.7	2.4	-1.3	233	2.5	2.0	1.5	182	2.5	0.1	2.5	109	12.8	-12.1	4.2
3	276	4.9	4.9	-0.5	311	3.7	2.8	-2.4	317	3.8	2.6	-2.8	304	4.0	3.3	-2.2	230	3.3	2.5	2.1	178	2.9	-0.1	2.9	103	11.2	-10.9	2.5
4	332	1.5	0.7	-1.3	297	3.5	3.1	-1.6	307	3.0	2.4	-1.8	320	2.3	1.5	-1.8	270	1.6	1.6	0.0	169	2.5	-0.5	2.5	96	12.0	-11.9	1.2
5	294	2.0	1.8	-0.8	294	2.2	2.0	-0.9	329	3.3	1.7	-2.8	307	3.1	2.5	-1.9	235	2.4	2.0	1.4	149	2.7	-1.4	2.3	96	13.6	-13.5	1.4
6	257	2.3	2.2	0.5	270	2.8	2.8	0.0	311	3.3	2.5	-2.2	294	3.0	2.7	-1.2	270	2.0	2.0	0.0	139	2.9	-1.9	2.2	95	15.6	-15.5	1.3
7	281	4.9	4.8	-0.9	276	4.4	4.4	-0.5	270	2.4	2.4	0.0	274	4.1	4.1	-0.3	218	1.6	1.0	1.3	121	2.6	-2.2	1.3	93	14.0	-14.0	0.8
8	266	1.3	1.3	0.1	276	3.6	3.6	-0.4	281	3.3	3.2	-0.6	279	4.5	4.4	-0.7	117	0.4	-0.4	0.2	127	3.8	-3.0	2.3	85	14.0	-13.9	-1.3
9	255	3.4	3.3	0.9	267	4.5	4.5	0.2	286	2.5	2.4	-0.7	299	3.1	2.7	-1.5	28	1.7	-0.8	-1.5	69	3.3	-3.1	-1.2	85	16.4	-16.3	-1.5
10	280	4.7	4.6	-0.8	279	3.8	3.8	-0.6	317	2.5	1.7	-1.8	321	2.6	1.6	-2.0	76	2.5	-2.4	-0.6	85	5.2	-5.2	-0.5	86	17.9	-17.8	-1.4
11	297	4.7	4.2	-2.1	312	4.0	3.0	-2.7	337	3.0	1.2	-2.8	338	2.2	0.8	-2.0	61	1.8	-1.6	-0.9	95	4.4	-4.4	0.4	86	18.2	-18.2	-1.2
12	265	3.6	3.6	0.3	301	3.1	2.7	-1.6	333	3.5	1.6	-3.1	331	2.1	1.0	-1.8	112	1.1	-1.0	0.4	96	6.1	-6.1	0.6	82	17.5	-17.3	-2.4
13	277	2.3	2.3	-0.3	306	4.1	3.3	-2.4	344	3.2	0.9	-3.1	298	1.7	1.5	-0.8	79	2.1	-2.1	-0.4	93	8.1	-8.1	0.4	87	17.1	-17.1	-0.9
14	306	2.6	2.1	-1.5	300	2.4	2.1	-1.2	327	4.0	2.2	-3.4	336	2.0	0.8	-1.8	64	3.2	-2.9	-1.4	97	7.8	-7.7	0.9	89	21.7	-21.7	-0.2
15	5	1.1	-0.1	-1.1	298	3.0	2.6	-1.4	332	3.0	1.4	-2.6	300	2.2	1.9	-1.1	63	3.6	-3.2	-1.6	82	9.8	-9.7	-1.3	82	18.3	-18.1	-2.4
16	267	3.6	3.6	0.2	275	4.3	4.3	-0.4	311	3.5	2.6	-2.3	298	3.0	2.6	-1.4	75	4.2	-4.1	-1.1	87	8.8	-8.8	-0.5	84	20.6	-20.5	-2.0
17	289	4.6	4.3	-1.5	298	4.7	4.1	-2.2	331	4.7	2.3	-4.1	337	2.8	1.1	-2.6	75	3.9	-3.8	-1.0	86	7.8	-7.8	-0.5	84	17.6	-17.5	-1.8
18	287	5.6	5.4	-1.6	290	5.5	5.2	-1.9	328	3.4	1.8	-2.9	320	4.5	2.9	-3.5	65	4.7	-4.3	-2.0	82	10.0	-9.9	-1.4	80	21.7	-21.3	-3.9
19	293	2.8	2.6	-1.1	295	5.3	4.8	-2.2	324	4.1	2.4	-3.3	325	2.9	1.7	-2.4	81	4.6	-4.5	-0.7	97	12.6	-12.5	1.5	83	18.6	-18.5	-2.2
20	257	6.1	5.9	1.4	285	5.5	5.3	-1.4	309	5.1	4.0	-3.2	342	1.9	0.6	-1.8	68	4.5	-4.2	-1.7	94	9.7	-9.7	0.6	90	22.3	-22.3	0.0
21	265	5.7	5.7	0.5	299	5.8	5.1	-2.8	312	4.5	3.3	-3.0	5	2.1	-0.2	-2.1	71	5.7	-5.4	-1.9	91	13.1	-13.1	0.3	85	22.6	-22.5	-2.0
22	262	5.9	5.8	0.8	283	5.7	5.5	-1.3	310	5.0	3.8	-3.2	13	2.3	-0.5	-2.2	71	7.3	-6.9	-2.4	84	11.6	-11.5	-1.3	80	24.0	-23.7	-4.0
23	284	5.5	5.3	-1.3	288	5.8	5.5	-1.8	308	4.4	3.5	-2.7	315	3.3	2.3	-2.3	88	5.1	-5.1	-0.2	85	11.2	-11.2	-1.0	80	23.0	-22.7	-3.8
24	263	7.6	7.5	0.9	280	7.8	7.7	-1.3	297	5.1	4.5	-2.3	314	3.5	2.5	-2.4	84	5.1	-5.1	-0.5	91	13.8	-13.8	0.2	86	23.2	-23.2	-1.5
25	272	5.5	5.5	-0.2	278	6.8	6.7	-1.0	309	4.9	3.8	-3.1	328	2.8	1.5	-2.4	77	6.5	-6.3	-1.5	83	13.4	-13.3	-1.7	86	22.4	-22.3	-1.6
26	280	6.0	5.9	-1.0	295	5.6	5.1	-2.4	301	3.3	2.8	-1.7	351	3.6	0.6	-3.6	67	6.4	-5.9	-2.5	76	14.7	-14.3	-3.5	85	26.8	-26.7	-2.5
27	267	6.8	6.8	0.4	291	6.0	5.6	-2.1	303	5.1	4.3	-2.8	42	2.5	-1.7	-1.9	92	7.4	-7.4	0.2	86	14.4	-14.4	-1.1	81	23.5	-23.2	-3.8
28	279	6.7	6.6	-1.0	288	7.6	7.2	-2.3	307	5.1	4.1	-3.1	13	2.6	-0.6	-2.5	98	7.5	-7.4	1.1	88	16.6	-16.6	-0.5	76	25.3	-24.5	-6.3
29	267	3.6	3.6	0.2	280	5.5	5.4	-1.0	300	5.0	4.3	-2.5	310	1.7	1.3	-1.1	90	7.1	-7.1	0.0	87	15.7	-15.7	-0.8	78	26.4	-25.8	-5.7
30	264	4.7	4.7	0.5	270	5.7	5.7	0.0	284	4.6	4.5	-1.1	276	0.9	0.9	-0.1	83	7.9	-7.8	-1.0	87	17.5	-17.5	-0.8	77	28.4	-27.6	-6.5

Daily Normals of Upper Air Winds (1971-2000)

NAGPUR

JULY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	255	4.2	4.1	1.1	277	6.3	6.2	-0.8	282	5.2	5.1	-1.1	263	0.8	0.8	0.1	85	7.3	-7.3	-0.6	86	15.7	-15.7	-1.2	75	26.6	-25.7	-7.0			
2	263	5.2	5.2	0.6	274	5.8	5.8	-0.4	280	4.7	4.6	-0.8	297	2.7	2.4	-1.2	85	7.5	-7.5	-0.6	82	15.5	-15.3	-2.2	83	28.4	-28.2	-3.4			
3	283	2.8	2.7	-0.6	279	6.7	6.6	-1.0	287	5.8	5.5	-1.7	315	1.4	1.0	-1.0	89	6.2	-6.2	-0.1	89	13.4	-13.4	-0.2	81	27.4	-27.0	-4.4			
4	273	3.7	3.7	-0.2	281	6.3	6.2	-1.2	306	4.2	3.4	-2.5	303	2.0	1.7	-1.1	88	5.9	-5.9	-0.2	90	14.2	-14.2	-0.1	84	29.1	-28.9	-3.2			
5	273	4.1	4.1	-0.2	277	6.0	6.0	-0.7	284	4.9	4.8	-1.2	328	1.5	0.8	-1.3	84	7.2	-7.2	-0.7	88	12.4	-12.4	-0.4	86	27.8	-27.7	-2.0			
6	275	6.4	6.4	-0.6	277	7.0	7.0	-0.8	278	5.5	5.4	-0.8	350	2.7	0.5	-2.7	85	7.5	-7.5	-0.6	93	17.1	-17.1	1.0	82	30.6	-30.3	-4.2			
7	274	4.3	4.3	-0.3	285	5.1	4.9	-1.3	289	5.6	5.3	-1.8	339	1.7	0.6	-1.6	78	8.5	-8.3	-1.7	87	14.5	-14.5	-0.7	81	30.2	-29.8	-4.9			
8	261	4.3	4.2	0.7	283	6.8	6.6	-1.5	297	4.9	4.4	-2.2	346	2.5	0.6	-2.4	94	7.8	-7.8	0.5	86	16.1	-16.1	-1.0	81	28.3	-28.0	-4.2			
9	257	4.8	4.7	1.1	281	6.3	6.2	-1.2	285	5.6	5.4	-1.4	327	2.7	1.5	-2.3	95	7.7	-7.7	0.7	87	15.9	-15.9	-0.9	85	29.4	-29.3	-2.5			
10	257	5.0	4.9	1.1	278	6.9	6.8	-0.9	288	6.0	5.7	-1.8	353	2.6	0.3	-2.6	84	7.1	-7.1	-0.7	90	17.1	-17.1	0.1	79	28.1	-27.6	-5.5			
11	272	6.4	6.4	-0.2	283	6.5	6.3	-1.5	298	5.0	4.4	-2.3	22	1.1	-0.4	-1.0	81	10.1	-10.0	-1.6	83	16.6	-16.5	-2.1	83	28.1	-27.9	-3.3			
12	284	6.4	6.2	-1.6	293	6.9	6.3	-2.7	290	6.3	5.9	-2.1	360	1.1	0.0	-1.1	89	9.5	-9.5	-0.2	83	17.2	-17.1	-2.1	75	27.7	-26.7	-7.4			
13	272	5.2	5.2	-0.2	283	7.4	7.2	-1.6	279	6.5	6.4	-1.0	360	0.5	0.0	-0.5	91	9.0	-9.0	0.2	85	16.2	-16.1	-1.3	75	28.2	-27.2	-7.4			
14	270	6.4	6.4	0.0	273	7.7	7.7	-0.4	277	6.3	6.2	-0.8	246	1.7	1.6	0.7	91	7.4	-7.4	0.1	80	16.8	-16.5	-3.0	74	27.4	-26.3	-7.7			
15	258	6.7	6.6	1.4	276	6.8	6.8	-0.7	277	5.8	5.8	-0.7	58	1.3	-1.1	-0.7	87	8.2	-8.2	-0.4	81	17.5	-17.3	-2.6	80	30.1	-29.6	-5.2			
16	264	6.3	6.3	0.7	274	7.6	7.6	-0.5	273	6.5	6.5	-0.3	288	0.9	0.9	-0.3	93	7.6	-7.6	0.4	83	16.9	-16.8	-2.1	82	29.5	-29.2	-4.1			
17	264	6.4	6.4	0.7	274	6.4	6.4	-0.5	278	6.0	5.9	-0.8	270	0.5	0.5	0.0	77	7.2	-7.0	-1.6	82	17.3	-17.1	-2.4	81	31.6	-31.2	-5.1			
18	254	6.9	6.6	1.9	273	8.3	8.3	-0.4	279	7.4	7.3	-1.2	286	1.9	1.8	-0.5	78	7.3	-7.1	-1.5	77	16.8	-16.4	-3.7	82	29.9	-29.6	-4.0			
19	261	5.0	4.9	0.8	268	8.2	8.2	0.3	275	8.2	8.2	-0.7	302	2.5	2.1	-1.3	83	8.1	-8.0	-1.0	81	17.3	-17.1	-2.8	85	29.3	-29.2	-2.8			
20	255	7.2	6.9	1.9	279	7.4	7.3	-1.2	289	6.5	6.1	-2.1	314	2.9	2.1	-2.0	81	7.3	-7.2	-1.2	84	15.5	-15.4	-1.5	84	28.3	-28.1	-3.1			
21	261	7.7	7.6	1.2	280	8.3	8.2	-1.4	279	6.9	6.8	-1.1	315	0.3	0.2	-0.2	82	9.4	-9.3	-1.3	85	17.1	-17.0	-1.4	82	27.2	-26.9	-3.8			
22	265	7.1	7.1	0.6	271	6.4	6.4	-0.1	277	5.6	5.6	-0.7	22	0.5	-0.2	-0.5	89	9.3	-9.3	-0.2	85	18.1	-18.0	-1.7	81	30.1	-29.8	-4.5			
23	278	6.8	6.7	-0.9	287	6.4	6.1	-1.9	284	4.1	4.0	-1.0	27	0.9	-0.4	-0.8	89	8.2	-8.2	-0.2	90	15.4	-15.4	0.0	80	26.7	-26.3	-4.6			
24	284	7.6	7.4	-1.9	276	7.6	7.6	-0.8	270	6.9	6.9	0.0	225	0.8	0.6	0.6	90	8.9	-8.9	0.0	85	17.4	-17.3	-1.6	84	29.9	-29.7	-3.0			
25	285	9.1	8.8	-2.4	280	8.8	8.7	-1.5	278	7.6	7.5	-1.1	304	1.4	1.2	-0.8	82	9.5	-9.4	-1.3	87	19.1	-19.1	-1.1	88	31.8	-31.8	-1.2			
26	277	6.6	6.6	-0.8	283	8.0	7.8	-1.8	286	8.2	7.9	-2.3	287	2.1	2.0	-0.6	87	7.8	-7.8	-0.4	82	18.4	-18.2	-2.7	84	28.4	-28.3	-2.9			
27	287	7.0	6.7	-2.1	286	8.3	8.0	-2.3	284	8.1	7.9	-2.0	267	2.0	2.0	0.1	92	8.4	-8.4	0.3	88	16.6	-16.6	-0.5	90	32.8	-32.8	0.2			
28	284	6.7	6.5	-1.6	285	7.8	7.5	-2.0	283	7.3	7.1	-1.7	324	2.4	1.4	-1.9	86	8.9	-8.9	-0.7	84	15.0	-14.9	-1.5	82	31.4	-31.1	-4.4			
29	279	5.0	4.9	-0.8	289	7.4	7.0	-2.4	290	7.0	6.6	-2.4	317	1.6	1.1	-1.2	90	8.9	-8.9	0.0	87	18.6	-18.6	-0.9	84	31.6	-31.4	-3.5			
30	284	3.8	3.7	-0.9	282	7.3	7.1	-1.5	286	6.6	6.4	-1.8	315	1.6	1.1	-1.1	93	10.1	-10.1	0.5	85	20.2	-20.1	-1.6	84	28.8	-28.6	-3.2			
31	291	6.1	5.7	-2.2	280	7.2	7.1	-1.2	277	4.8	4.8	-0.6	40	2.3	-1.5	-1.8	81	8.9	-8.8	-1.4	86	18.2	-18.2	-1.3	81	31.7	-31.3	-5.2			

Daily Normals of Upper Air Winds (1971-2000)

NAGPUR

AUGUST

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	275	7.8	7.8	-0.7	290	6.4	6.0	-2.2	292	3.7	3.4	-1.4	11	1.6	-0.3	-1.6	83	10.3	-10.2	-1.3	87	18.5	-18.5	-0.9	80	31.2	-30.8	-5.2
2	269	7.5	7.5	0.1	288	5.4	5.1	-1.7	299	3.9	3.4	-1.9	27	3.0	-1.4	-2.7	86	11.0	-11.0	-0.8	84	19.1	-19.0	-1.9	80	32.8	-32.3	-5.8
3	287	7.7	7.4	-2.2	292	7.4	6.8	-2.8	301	4.5	3.9	-2.3	31	1.7	-0.9	-1.5	86	9.9	-9.9	-0.7	86	18.7	-18.7	-1.3	78	29.2	-28.5	-6.2
4	279	7.5	7.4	-1.2	285	8.6	8.3	-2.3	287	5.9	5.6	-1.7	8	1.4	-0.2	-1.4	82	8.3	-8.2	-1.1	78	16.5	-16.1	-3.4	76	24.0	-23.3	-5.7
5	282	7.5	7.3	-1.6	284	8.3	8.1	-2.0	285	7.0	6.8	-1.8	312	1.5	1.1	-1.0	84	7.2	-7.2	-0.8	80	16.4	-16.2	-2.8	81	29.7	-29.3	-4.8
6	274	7.9	7.9	-0.6	288	9.2	8.8	-2.8	289	7.7	7.3	-2.5	330	2.8	1.4	-2.4	74	9.2	-8.8	-2.6	78	16.2	-15.8	-3.4	82	30.7	-30.4	-4.3
7	285	8.9	8.6	-2.3	290	8.1	7.6	-2.7	293	7.3	6.7	-2.8	355	1.2	0.1	-1.2	83	9.4	-9.3	-1.2	85	18.5	-18.4	-1.6	83	32.0	-31.7	-4.1
8	289	8.5	8.0	-2.8	290	8.1	7.6	-2.7	291	6.2	5.8	-2.2	10	2.9	-0.5	-2.9	75	10.0	-9.7	-2.6	75	18.3	-17.7	-4.7	84	29.2	-29.0	-3.3
9	283	8.2	8.0	-1.8	286	8.3	8.0	-2.3	294	5.7	5.2	-2.3	37	1.0	-0.6	-0.8	79	10.1	-9.9	-1.9	87	18.2	-18.2	-0.9	80	26.4	-26.0	-4.7
10	287	5.4	5.2	-1.6	293	5.7	5.3	-2.2	281	4.3	4.2	-0.8	59	1.2	-1.0	-0.6	85	9.8	-9.8	-0.9	87	16.7	-16.7	-1.0	83	29.8	-29.6	-3.8
11	269	4.0	4.0	0.1	285	5.9	5.7	-1.5	286	4.4	4.2	-1.2	16	1.9	-0.5	-1.8	91	9.3	-9.3	0.1	80	18.8	-18.5	-3.4	82	25.6	-25.4	-3.4
12	273	5.1	5.1	-0.3	290	7.6	7.1	-2.6	297	5.3	4.7	-2.4	319	2.1	1.4	-1.6	75	8.9	-8.6	-2.3	84	17.8	-17.7	-1.9	80	28.9	-28.5	-4.8
13	270	6.1	6.1	0.0	298	8.1	7.1	-3.8	292	6.3	5.8	-2.4	21	2.8	-1.0	-2.6	69	7.7	-7.2	-2.8	85	15.8	-15.7	-1.3	83	27.6	-27.4	-3.5
14	277	6.2	6.1	-0.8	291	8.2	7.7	-2.9	292	6.5	6.0	-2.4	355	2.3	0.2	-2.3	90	6.7	-6.7	0.0	82	14.1	-14.0	-2.0	88	27.7	-27.7	-0.9
15	286	7.4	7.1	-2.0	298	8.1	7.2	-3.8	305	6.0	4.9	-3.4	338	2.7	1.0	-2.5	82	6.3	-6.2	-0.9	90	15.7	-15.7	-0.1	85	25.2	-25.1	-2.3
16	288	7.5	7.1	-2.3	290	7.6	7.1	-2.6	297	5.6	5.0	-2.5	300	0.8	0.7	-0.4	83	8.4	-8.3	-1.0	85	16.6	-16.5	-1.4	86	24.0	-23.9	-1.6
17	288	6.0	5.7	-1.8	286	9.9	9.5	-2.8	289	5.2	4.9	-1.7	349	1.0	0.2	-1.0	92	8.2	-8.2	0.3	89	15.5	-15.5	-0.3	83	26.9	-26.7	-3.5
18	291	7.2	6.7	-2.6	294	6.6	6.0	-2.7	300	6.4	5.6	-3.2	317	2.5	1.7	-1.8	84	5.9	-5.9	-0.6	87	13.6	-13.6	-0.7	86	27.9	-27.8	-1.8
19	280	6.6	6.5	-1.2	291	6.5	6.1	-2.3	298	5.4	4.8	-2.5	21	0.9	-0.3	-0.8	90	9.2	-9.2	0.0	87	15.2	-15.2	-0.8	88	29.7	-29.7	-0.8
20	284	8.2	8.0	-2.0	299	6.5	5.7	-3.2	306	4.7	3.8	-2.8	76	1.6	-1.6	-0.4	92	10.7	-10.7	0.3	90	17.8	-17.8	0.0	86	28.1	-28.0	-2.0
21	303	6.7	5.6	-3.7	302	6.5	5.5	-3.5	313	4.0	2.9	-2.7	47	1.9	-1.4	-1.3	86	9.3	-9.3	-0.6	88	14.8	-14.8	-0.6	86	29.2	-29.1	-2.2
22	280	4.1	4.0	-0.7	302	6.0	5.1	-3.2	315	3.7	2.6	-2.6	43	1.6	-1.1	-1.2	73	8.9	-8.5	-2.6	78	14.2	-13.9	-3.0	82	27.7	-27.5	-3.7
23	279	4.5	4.4	-0.7	288	5.9	5.6	-1.8	293	3.4	3.1	-1.3	73	1.0	-1.0	-0.3	101	8.9	-8.7	1.7	83	15.3	-15.2	-1.8	85	27.9	-27.8	-2.6
24	287	2.8	2.7	-0.8	287	6.4	6.1	-1.9	291	4.0	3.7	-1.4	276	0.9	0.9	-0.1	96	9.2	-9.2	0.9	86	17.3	-17.3	-1.3	84	24.8	-24.7	-2.6
25	288	3.2	3.0	-1.0	292	5.0	4.6	-1.9	298	5.2	4.6	-2.4	299	1.0	0.9	-0.5	89	7.9	-7.9	-0.1	95	15.7	-15.6	1.5	86	24.3	-24.3	-1.5
26	267	3.3	3.3	0.2	299	5.2	4.6	-2.5	293	4.0	3.7	-1.6	27	1.8	-0.8	-1.6	80	9.2	-9.1	-1.6	90	14.8	-14.8	0.1	88	25.8	-25.8	-0.8
27	302	4.5	3.8	-2.4	299	6.8	5.9	-3.3	303	4.5	3.8	-2.5	40	3.4	-2.2	-2.6	77	9.8	-9.5	-2.2	88	16.1	-16.1	-0.7	84	27.7	-27.5	-3.0
28	291	4.2	3.9	-1.5	298	6.4	5.7	-3.0	313	4.5	3.3	-3.1	20	2.0	-0.7	-1.9	73	6.8	-6.5	-2.0	79	13.5	-13.3	-2.5	81	26.2	-25.9	-3.9
29	276	6.3	6.3	-0.7	291	7.1	6.6	-2.5	304	4.7	3.9	-2.6	347	1.8	0.4	-1.8	85	7.9	-7.9	-0.7	85	11.7	-11.7	-1.0	83	24.7	-24.5	-2.8
30	289	5.3	5.0	-1.7	288	6.0	5.7	-1.9	294	4.3	3.9	-1.7	39	1.4	-0.9	-1.1	82	6.6	-6.5	-0.9	87	13.4	-13.4	-0.8	88	22.4	-22.4	-0.7
31	287	5.5	5.3	-1.6	283	5.7	5.5	-1.3	285	3.9	3.8	-1.0	56	0.7	-0.6	-0.4	96	8.1	-8.1	0.9	86	15.6	-15.6	-1.1	85	23.4	-23.3	-2.0

Daily Normals of Upper Air Winds (1971-2000)

NAGPUR

SEPTEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	289	5.2	4.9	-1.7	292	5.8	5.4	-2.2	302	3.2	2.7	-1.7	45	1.4	-1.0	-1.0	96	6.5	-6.5	0.7	90	14.0	-14.0	0.0	83	23.2	-23.0	-2.8
2	282	4.7	4.6	-1.0	291	5.3	5.0	-1.9	300	3.8	3.3	-1.9	5	1.2	-0.1	-1.2	85	6.9	-6.9	-0.6	78	17.8	-17.4	-3.7	83	22.1	-21.9	-2.8
3	275	6.2	6.2	-0.5	287	6.5	6.2	-1.9	288	4.8	4.6	-1.5	24	1.0	-0.4	-0.9	82	6.5	-6.4	-0.9	95	13.2	-13.2	1.1	80	24.0	-23.6	-4.2
4	270	5.5	5.5	0.0	297	6.8	6.0	-3.1	292	5.5	5.1	-2.1	328	2.6	1.4	-2.2	84	7.1	-7.1	-0.7	93	12.9	-12.9	0.6	82	22.2	-22.0	-3.0
5	274	5.2	5.2	-0.4	291	6.8	6.4	-2.4	297	5.7	5.1	-2.6	8	1.4	-0.2	-1.4	85	6.6	-6.6	-0.6	78	12.2	-11.9	-2.5	75	20.6	-19.9	-5.5
6	274	4.8	4.8	-0.3	295	6.5	5.9	-2.8	294	5.4	4.9	-2.2	277	2.3	2.3	-0.3	84	5.4	-5.4	-0.6	80	12.1	-11.9	-2.1	84	22.3	-22.2	-2.4
7	282	4.2	4.1	-0.9	299	5.2	4.6	-2.5	301	5.6	4.8	-2.9	300	1.6	1.4	-0.8	75	4.2	-4.1	-1.1	100	11.4	-11.2	1.9	91	21.6	-21.6	0.2
8	278	5.0	5.0	-0.7	305	5.7	4.7	-3.3	309	4.6	3.6	-2.9	37	0.5	-0.3	-0.4	100	4.1	-4.0	0.7	98	9.1	-9.0	1.3	90	17.6	-17.6	-0.1
9	270	3.9	3.9	0.0	308	5.0	3.9	-3.1	318	3.8	2.5	-2.8	338	0.5	0.2	-0.5	98	5.2	-5.2	0.7	98	11.7	-11.6	1.7	92	18.3	-18.3	0.7
10	307	3.4	2.7	-2.0	324	5.7	3.4	-4.6	325	3.9	2.2	-3.2	331	1.8	0.9	-1.6	80	6.2	-6.1	-1.1	96	12.5	-12.4	1.4	91	20.4	-20.4	0.4
11	287	3.4	3.2	-1.0	317	5.6	3.8	-4.1	327	4.5	2.5	-3.8	315	0.7	0.5	-0.5	95	4.4	-4.4	0.4	90	12.3	-12.3	-0.1	87	18.5	-18.5	-0.9
12	297	3.1	2.8	-1.4	311	5.3	4.0	-3.5	315	4.4	3.1	-3.1	315	0.8	0.6	-0.6	100	5.5	-5.4	1.0	98	11.6	-11.5	1.6	88	18.1	-18.1	-0.6
13	271	3.9	3.9	-0.1	300	6.0	5.2	-3.0	314	4.5	3.2	-3.1	285	1.1	1.1	-0.3	93	4.3	-4.3	0.2	90	12.8	-12.8	0.0	86	19.7	-19.6	-1.5
14	280	5.8	5.7	-1.0	295	5.5	5.0	-2.3	310	5.2	4.0	-3.3	252	1.6	1.5	0.5	99	4.0	-4.0	0.6	92	11.6	-11.6	0.5	90	16.0	-16.0	0.0
15	293	4.9	4.5	-1.9	318	4.2	2.8	-3.1	321	4.1	2.6	-3.2	284	0.4	0.4	-0.1	90	3.7	-3.7	0.0	96	10.0	-9.9	1.1	91	14.8	-14.8	0.2
16	302	3.1	2.6	-1.6	328	3.6	1.9	-3.0	330	3.8	1.9	-3.3	228	1.3	1.0	0.9	97	3.4	-3.4	0.4	100	9.8	-9.7	1.7	86	16.2	-16.2	-1.0
17	282	4.4	4.3	-0.9	323	3.0	1.8	-2.4	322	4.2	2.6	-3.3	284	1.2	1.2	-0.3	98	3.6	-3.6	0.5	98	9.5	-9.4	1.4	94	15.7	-15.7	1.0
18	281	5.9	5.8	-1.1	337	3.8	1.5	-3.5	332	4.1	1.9	-3.6	349	1.0	0.2	-1.0	117	2.5	-2.2	1.1	111	7.2	-6.7	2.6	93	13.8	-13.8	0.8
19	301	4.4	3.8	-2.3	332	3.2	1.5	-2.8	342	2.9	0.9	-2.8	207	0.2	0.1	0.2	107	2.7	-2.6	0.8	112	5.7	-5.3	2.1	87	13.6	-13.6	-0.6
20	309	3.6	2.8	-2.3	2	2.9	-0.1	-2.9	335	2.6	1.1	-2.4	188	0.7	0.1	0.7	107	1.7	-1.6	0.5	107	7.7	-7.3	2.3	104	13.3	-12.9	3.1
21	360	2.0	0.0	-2.0	18	2.2	-0.7	-2.1	25	1.9	-0.8	-1.7	167	1.8	-0.4	1.8	118	4.0	-3.5	1.9	114	6.8	-6.2	2.8	99	13.4	-13.2	2.0
22	315	1.0	0.7	-0.7	357	2.2	0.1	-2.2	14	2.5	-0.6	-2.4	217	1.0	0.6	0.8	112	4.0	-3.7	1.5	95	5.9	-5.9	0.5	90	12.5	-12.5	-0.1
23	351	2.0	0.3	-2.0	5	2.2	-0.2	-2.2	358	3.0	0.1	-3.0	81	0.6	-0.6	-0.1	99	3.1	-3.1	0.5	107	7.3	-7.0	2.1	96	15.3	-15.2	1.7
24	334	2.5	1.1	-2.3	355	1.2	0.1	-1.2	353	1.6	0.2	-1.6	270	0.2	0.2	0.0	96	3.0	-3.0	0.3	106	7.4	-7.1	2.0	91	13.7	-13.7	0.2
25	339	1.7	0.6	-1.6	5	2.5	-0.2	-2.5	342	1.9	0.6	-1.8	117	0.2	-0.2	0.1	117	1.1	-1.0	0.5	89	4.9	-4.9	-0.1	96	11.0	-10.9	1.2
26	360	3.0	0.0	-3.0	6	3.0	-0.3	-3.0	353	3.3	0.4	-3.3	302	1.5	1.3	-0.8	81	1.2	-1.2	-0.2	121	4.9	-4.2	2.5	96	12.3	-12.2	1.2
27	82	2.1	-2.1	-0.3	345	2.0	0.5	-1.9	321	2.2	1.4	-1.7	216	1.4	0.8	1.1	205	1.9	0.8	1.7	135	3.4	-2.4	2.4	88	11.1	-11.1	-0.3
28	93	1.7	-1.7	0.1	2	2.3	-0.1	-2.3	328	2.6	1.4	-2.2	257	0.9	0.9	0.2	150	2.2	-1.1	1.9	117	5.7	-5.1	2.6	92	10.9	-10.9	0.4
29	51	3.3	-2.6	-2.1	3	1.8	-0.1	-1.8	348	3.3	0.7	-3.2	259	1.6	1.6	0.3	196	2.6	0.7	2.5	145	3.3	-1.9	2.7	109	7.8	-7.4	2.6
30	43	2.6	-1.8	-1.9	17	2.4	-0.7	-2.3	342	2.6	0.8	-2.5	281	2.0	2.0	-0.4	198	1.9	0.6	1.8	132	4.5	-3.3	3.0	107	8.7	-8.3	2.6

Daily Normals of Upper Air Winds (1971-2000)

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NAGPUR

OCTOBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	56	1.8	-1.5	-1.0	22	3.5	-1.3	-3.3	12	4.2	-0.9	-4.1	270	1.3	1.3	0.0	182	2.4	0.1	2.4	153	4.2	-1.9	3.7	105	9.8	-9.5	2.5			
2	45	1.8	-1.3	-1.3	27	3.8	-1.7	-3.4	360	4.5	0.0	-4.5	275	1.1	1.1	-0.1	201	3.0	1.1	2.8	165	7.6	-2.0	7.3	109	9.0	-8.5	3.0			
3	77	2.2	-2.1	-0.5	14	3.0	-0.7	-2.9	355	3.5	0.3	-3.5	299	1.3	1.1	-0.6	203	2.8	1.1	2.6	166	4.9	-1.2	4.7	109	10.3	-9.8	3.3			
4	68	2.4	-2.2	-0.9	5	3.2	-0.3	-3.2	350	3.4	0.6	-3.3	307	1.5	1.2	-0.9	132	1.3	-1.0	0.9	144	4.9	-2.9	4.0	107	7.0	-6.7	2.1			
5	54	2.2	-1.8	-1.3	6	3.7	-0.4	-3.7	353	3.9	0.5	-3.9	302	0.9	0.8	-0.5	167	2.6	-0.6	2.5	146	5.5	-3.1	4.6	109	11.0	-10.4	3.5			
6	55	2.9	-2.4	-1.7	35	2.8	-1.6	-2.3	13	2.7	-0.6	-2.6	235	1.2	1.0	0.7	218	3.6	2.2	2.8	162	4.4	-1.4	4.2	109	8.4	-8.0	2.7			
7	55	3.7	-3.0	-2.1	29	2.5	-1.2	-2.2	351	3.6	0.6	-3.6	270	1.1	1.1	0.0	222	4.2	2.8	3.1	171	5.6	-0.9	5.5	120	7.3	-6.3	3.6			
8	35	3.7	-2.1	-3.0	21	3.4	-1.2	-3.2	6	3.9	-0.4	-3.9	339	1.9	0.7	-1.8	246	3.7	3.4	1.5	184	5.2	0.4	5.2	119	5.7	-5.0	2.8			
9	52	3.6	-2.8	-2.2	23	2.6	-1.0	-2.4	20	3.2	-1.1	-3.0	253	1.7	1.6	0.5	243	4.6	4.1	2.1	213	5.4	2.9	4.5	141	5.4	-3.4	4.2			
10	80	2.9	-2.9	-0.5	35	2.4	-1.4	-2.0	13	2.6	-0.6	-2.5	297	1.1	1.0	-0.5	249	4.4	4.1	1.6	211	4.8	2.5	4.1	130	3.8	-2.9	2.4			
11	108	1.6	-1.5	0.5	9	1.8	-0.3	-1.8	358	3.6	0.1	-3.6	272	2.4	2.4	-0.1	242	5.4	4.8	2.5	234	6.6	5.3	3.9	147	4.4	-2.4	3.7			
12	60	0.8	-0.7	-0.4	22	2.9	-1.1	-2.7	11	3.3	-0.6	-3.2	264	2.0	2.0	0.2	248	5.9	5.5	2.2	223	5.4	3.7	4.0	129	5.0	-3.9	3.2			
13	45	2.7	-1.9	-1.9	25	3.1	-1.3	-2.8	4	4.2	-0.3	-4.2	264	3.6	3.6	0.4	237	6.7	5.6	3.7	218	8.4	5.2	6.6	167	6.9	-1.6	6.7			
14	48	3.9	-2.9	-2.6	39	3.5	-2.2	-2.7	13	5.0	-1.1	-4.9	269	3.9	3.9	0.1	247	7.5	6.9	2.9	213	8.0	4.4	6.7	187	4.9	0.6	4.9			
15	56	4.1	-3.4	-2.3	46	3.7	-2.7	-2.6	21	4.3	-1.5	-4.0	310	2.6	2.0	-1.7	249	6.6	6.2	2.4	226	8.1	5.9	5.6	132	3.6	-2.7	2.4			
16	45	3.7	-2.6	-2.6	38	3.3	-2.0	-2.6	28	4.0	-1.9	-3.5	296	2.8	2.5	-1.2	251	5.5	5.2	1.8	226	7.3	5.2	5.1	164	2.9	-0.8	2.8			
17	63	3.5	-3.1	-1.6	48	2.5	-1.9	-1.7	360	2.0	0.0	-2.0	285	2.0	1.9	-0.5	252	6.7	6.4	2.1	226	9.3	6.7	6.5	126	4.7	-3.8	2.8			
18	35	3.5	-2.0	-2.9	35	1.6	-0.9	-1.3	351	2.4	0.4	-2.4	304	2.3	1.9	-1.3	253	7.6	7.3	2.2	223	10.2	6.9	7.5	146	2.9	-1.6	2.4			
19	44	3.2	-2.2	-2.3	28	2.4	-1.1	-2.1	352	3.5	0.5	-3.5	267	3.5	3.5	0.2	251	7.2	6.8	2.4	237	9.5	8.0	5.1	203	4.1	1.6	3.8			
20	54	3.2	-2.6	-1.9	33	3.3	-1.8	-2.8	9	3.9	-0.6	-3.9	286	3.5	3.4	-1.0	258	7.2	7.0	1.5	242	10.1	8.9	4.8	141	2.7	-1.7	2.1			
21	77	0.9	-0.9	-0.2	32	3.6	-1.9	-3.1	6	4.0	-0.4	-4.0	268	3.7	3.7	0.1	248	8.8	8.2	3.3	238	10.1	8.5	5.4	174	1.9	-0.2	1.9			
22	11	2.5	-0.5	-2.5	38	3.9	-2.4	-3.1	360	3.0	0.0	-3.0	261	4.5	4.4	0.7	255	10.1	9.8	2.6	252	10.3	9.8	3.1	190	2.9	0.5	2.9			
23	59	2.3	-2.0	-1.2	56	2.3	-1.9	-1.3	351	1.3	0.2	-1.3	258	3.3	3.2	0.7	257	10.1	9.9	2.2	249	10.9	10.2	3.9	223	2.1	1.4	1.5			
24	51	1.9	-1.5	-1.2	32	2.6	-1.4	-2.2	333	2.0	0.9	-1.8	262	5.5	5.4	0.8	260	11.9	11.7	2.0	244	11.7	10.5	5.1	211	4.4	2.3	3.8			
25	53	2.0	-1.6	-1.2	38	2.8	-1.7	-2.2	310	2.5	1.9	-1.6	267	6.6	6.6	0.4	261	12.7	12.5	2.0	254	13.4	12.9	3.8	233	4.8	3.8	2.9			
26	69	3.0	-2.8	-1.1	27	3.4	-1.5	-3.0	326	2.5	1.4	-2.1	285	5.6	5.4	-1.4	260	12.1	11.9	2.1	240	15.1	13.0	7.6	208	3.2	1.5	2.8			
27	51	2.6	-2.0	-1.6	33	3.7	-2.0	-3.1	342	2.9	0.9	-2.8	271	4.0	4.0	-0.1	246	12.4	11.3	5.1	237	14.2	11.9	7.8	236	4.5	3.7	2.5			
28	55	4.4	-3.6	-2.5	43	4.0	-2.7	-2.9	356	3.2	0.2	-3.2	280	4.8	4.7	-0.8	249	12.9	12.1	4.6	238	17.2	14.6	9.1	241	4.6	4.0	2.2			
29	34	2.2	-1.2	-1.8	27	3.8	-1.7	-3.4	358	2.7	0.1	-2.7	276	5.1	5.1	-0.5	250	14.2	13.3	4.9	241	15.1	13.2	7.3	214	3.6	2.0	3.0			
30	46	4.5	-3.2	-3.1	35	4.5	-2.6	-3.7	12	3.4	-0.7	-3.3	281	3.6	3.5	-0.7	253	11.3	10.8	3.4	243	14.8	13.2	6.7	213	4.0	2.2	3.4			
31	58	4.0	-3.4	-2.1	41	4.5	-3.0	-3.4	29	2.5	-1.2	-2.2	267	5.9	5.9	0.3	258	16.4	16.0	3.4	239	18.8	16.1	9.8	255	2.3	2.2	0.6			

Daily Normals of Upper Air Winds (1971-2000)

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NAGPUR

NOVEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	57	3.8	-3.2	-2.1	39	3.3	-2.1	-2.6	13	2.7	-0.6	-2.6	290	4.6	4.3	-1.6	261	13.7	13.5	2.1	249	17.0	15.8	6.2	217	3.5	2.1	2.8			
2	63	3.7	-3.3	-1.7	38	3.7	-2.3	-2.9	337	2.6	1.0	-2.4	303	5.3	4.4	-2.9	259	10.1	9.9	1.9	251	18.3	17.3	5.9	265	5.5	5.5	0.5			
3	61	3.8	-3.3	-1.8	44	3.2	-2.2	-2.3	340	2.0	0.7	-1.9	295	4.7	4.3	-2.0	272	13.9	13.9	-0.6	249	18.5	17.2	6.7	276	5.4	5.4	-0.6			
4	61	3.9	-3.4	-1.9	43	3.8	-2.6	-2.8	345	2.7	0.7	-2.6	294	6.0	5.5	-2.4	268	13.9	13.9	0.4	248	19.9	18.4	7.5	261	5.5	5.4	0.9			
5	58	3.6	-3.0	-1.9	27	3.3	-1.5	-2.9	359	4.3	0.1	-4.3	305	5.8	4.8	-3.3	268	13.9	13.9	0.4	254	18.8	18.1	5.2	278	5.0	5.0	-0.7			
6	57	3.1	-2.6	-1.7	36	3.4	-2.0	-2.8	4	3.1	-0.2	-3.1	301	5.1	4.4	-2.6	269	13.3	13.3	0.3	252	18.1	17.2	5.7	259	4.3	4.2	0.8			
7	65	3.8	-3.5	-1.6	40	3.3	-2.1	-2.5	5	2.4	-0.2	-2.4	287	5.1	4.9	-1.5	270	13.1	13.1	-0.1	253	16.3	15.6	4.8	252	7.2	6.9	2.2			
8	49	3.3	-2.5	-2.2	32	2.8	-1.5	-2.4	358	3.0	0.1	-3.0	294	6.6	6.0	-2.7	267	14.7	14.7	0.8	254	19.2	18.5	5.2	268	5.6	5.6	0.2			
9	54	3.2	-2.6	-1.9	31	2.6	-1.3	-2.2	340	3.3	1.1	-3.1	293	7.7	7.1	-3.0	273	15.1	15.1	-0.8	264	16.4	16.3	1.7	247	3.6	3.3	1.4			
10	79	2.0	-2.0	-0.4	8	2.9	-0.4	-2.9	329	3.5	1.8	-3.0	289	7.2	6.8	-2.4	269	15.7	15.7	0.3	256	16.8	16.3	4.0	246	6.0	5.5	2.5			
11	38	1.6	-1.0	-1.3	16	2.5	-0.7	-2.4	333	3.5	1.6	-3.1	304	4.8	4.0	-2.7	274	15.5	15.5	-1.0	257	18.4	17.9	4.1	252	5.2	5.0	1.6			
12	40	1.6	-1.0	-1.2	29	2.9	-1.4	-2.5	354	2.9	0.3	-2.9	303	5.1	4.3	-2.8	274	15.9	15.9	-1.2	257	17.5	17.1	3.8	264	7.8	7.8	0.8			
13	30	1.4	-0.7	-1.2	32	3.1	-1.6	-2.6	13	3.2	-0.7	-3.1	316	5.9	4.1	-4.2	272	12.9	12.9	-0.5	252	17.4	16.5	5.4	251	7.2	6.8	2.3			
14	64	3.0	-2.7	-1.3	37	3.4	-2.0	-2.7	355	3.3	0.3	-3.3	298	4.7	4.1	-2.2	269	14.1	14.1	0.2	253	19.3	18.4	5.8	267	7.4	7.4	0.4			
15	59	3.5	-3.0	-1.8	35	3.8	-2.2	-3.1	360	2.8	0.0	-2.8	290	5.2	4.9	-1.8	267	15.7	15.7	0.9	258	19.0	18.6	4.0	269	8.6	8.6	0.1			
16	70	3.8	-3.6	-1.3	47	2.3	-1.7	-1.6	352	3.6	0.5	-3.6	282	7.0	6.8	-1.5	260	17.4	17.2	2.9	244	23.8	21.5	10.3	245	7.9	7.2	3.3			
17	45	2.7	-1.9	-1.9	43	2.3	-1.6	-1.7	330	3.2	1.6	-2.8	278	7.5	7.4	-1.0	258	19.6	19.2	4.1	244	25.1	22.5	11.1	258	10.9	10.7	2.3			
18	43	2.5	-1.7	-1.8	27	2.5	-1.1	-2.2	319	3.0	2.0	-2.3	276	7.9	7.9	-0.8	256	19.4	18.8	4.7	245	22.6	20.4	9.7	258	9.9	9.7	2.0			
19	39	1.4	-0.9	-1.1	20	2.3	-0.8	-2.2	315	3.0	2.1	-2.1	281	9.0	8.8	-1.7	255	19.2	18.5	5.0	241	24.4	21.4	11.8	243	12.0	10.7	5.5			
20	70	1.5	-1.4	-0.5	30	2.8	-1.4	-2.4	338	3.7	1.4	-3.4	278	8.2	8.1	-1.1	254	18.8	18.1	5.2	244	24.9	22.3	11.0	250	10.4	9.8	3.6			
21	67	2.3	-2.1	-0.9	33	3.0	-1.6	-2.5	317	2.1	1.4	-1.5	273	8.7	8.7	-0.4	256	17.6	17.1	4.2	246	24.8	22.7	10.0	233	7.1	5.7	4.3			
22	67	2.6	-2.4	-1.0	28	1.9	-0.9	-1.7	267	2.1	2.1	0.1	267	8.4	8.4	0.4	254	21.1	20.3	5.9	247	27.2	25.0	10.7	260	9.1	9.0	1.6			
23	41	3.3	-2.2	-2.5	17	1.7	-0.5	-1.6	297	2.2	2.0	-1.0	275	8.3	8.3	-0.7	261	19.3	19.1	2.9	249	22.0	20.6	7.8	244	10.4	9.4	4.5			
24	32	2.5	-1.3	-2.1	17	2.1	-0.6	-2.0	320	3.3	2.1	-2.5	276	9.4	9.3	-1.0	264	17.9	17.8	1.9	245	23.7	21.5	10.0	249	10.7	10.0	3.9			
25	41	2.1	-1.4	-1.6	22	2.2	-0.8	-2.0	316	3.0	2.1	-2.2	289	8.1	7.7	-2.6	264	18.6	18.5	1.9	247	22.1	20.3	8.7	262	9.2	9.1	1.3			
26	43	2.1	-1.4	-1.5	13	1.7	-0.4	-1.7	304	2.9	2.4	-1.6	279	9.2	9.1	-1.4	266	20.2	20.2	1.3	251	22.4	21.2	7.3	256	12.4	12.0	3.1			
27	52	1.8	-1.4	-1.1	10	1.7	-0.3	-1.7	292	4.2	3.9	-1.6	272	11.7	11.7	-0.5	263	20.0	19.8	2.5	242	22.1	19.5	10.5	261	9.1	9.0	1.4			
28	72	2.0	-1.9	-0.6	354	1.9	0.2	-1.9	307	5.0	4.0	-3.0	281	10.8	10.6	-2.0	261	23.6	23.3	3.7	246	25.1	23.0	10.1	252	10.9	10.4	3.4			
29	74	2.2	-2.1	-0.6	347	1.7	0.4	-1.7	307	4.3	3.4	-2.6	282	10.8	10.6	-2.3	262	22.5	22.3	3.3	247	26.1	24.1	10.1	242	10.6	9.4	4.9			
30	47	1.6	-1.2	-1.1	25	1.9	-0.8	-1.7	312	3.6	2.7	-2.4	274	11.6	11.6	-0.8	266	22.4	22.3	1.6	258	28.2	27.6	5.9	248	17.1	15.9	6.4			

Daily Normals of Upper Air Winds (1971-2000)

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NAGPUR

DECEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	39	2.1	-1.3	-1.6	8	2.7	-0.4	-2.7	302	3.8	3.2	-2.0	278	10.7	10.6	-1.5	266	20.9	20.9	1.4	252	25.4	24.2	7.7	264	13.2	13.1	1.3			
2	66	1.7	-1.6	-0.7	17	1.7	-0.5	-1.6	278	2.9	2.9	-0.4	277	10.9	10.8	-1.4	264	21.7	21.6	2.2	251	25.1	23.7	8.3	241	15.3	13.4	7.4			
3	72	1.9	-1.8	-0.6	3	1.7	-0.1	-1.7	286	3.5	3.4	-1.0	276	9.4	9.3	-1.0	271	19.9	19.9	-0.4	250	24.5	23.1	8.2	265	13.6	13.5	1.2			
4	53	3.5	-2.8	-2.1	20	2.3	-0.8	-2.2	319	3.2	2.1	-2.4	276	9.8	9.7	-1.1	266	21.1	21.1	1.3	256	26.6	25.8	6.6	264	18.0	17.9	2.0			
5	55	1.9	-1.6	-1.1	353	2.3	0.3	-2.3	309	4.8	3.7	-3.0	277	10.5	10.4	-1.2	260	20.2	19.9	3.5	252	24.0	22.9	7.3	256	15.2	14.7	3.8			
6	64	2.8	-2.5	-1.2	12	1.9	-0.4	-1.9	312	4.6	3.4	-3.1	278	10.5	10.4	-1.5	264	19.8	19.7	2.0	257	24.4	23.7	5.6	260	12.4	12.2	2.2			
7	62	1.7	-1.5	-0.8	360	2.1	0.0	-2.1	315	3.8	2.7	-2.7	288	10.7	10.2	-3.3	268	20.9	20.9	0.8	253	27.0	25.8	7.8	262	14.1	14.0	1.9			
8	47	2.5	-1.8	-1.7	15	3.4	-0.9	-3.3	319	3.5	2.3	-2.6	274	9.1	9.1	-0.7	266	22.4	22.3	1.7	252	28.0	26.7	8.5	251	16.9	16.0	5.5			
9	15	1.6	-0.4	-1.5	343	2.1	0.6	-2.0	295	4.1	3.7	-1.7	267	11.3	11.3	0.6	264	21.5	21.4	2.4	252	26.9	25.6	8.4	263	15.6	15.5	2.0			
10	22	1.1	-0.4	-1.0	360	1.7	0.0	-1.7	283	6.2	6.0	-1.4	287	10.9	10.4	-3.1	267	21.8	21.8	1.2	259	25.0	24.5	4.9	248	9.9	9.2	3.7			
11	68	2.7	-2.5	-1.0	357	1.9	0.1	-1.9	303	3.5	2.9	-1.9	279	12.5	12.3	-2.0	264	22.2	22.1	2.2	255	26.5	25.6	6.8	258	10.5	10.3	2.2			
12	54	1.9	-1.5	-1.1	5	2.2	-0.2	-2.2	297	3.9	3.5	-1.8	275	10.4	10.4	-0.9	259	20.3	19.9	3.9	254	27.1	26.0	7.7	271	13.1	13.1	-0.3			
13	62	1.9	-1.7	-0.9	341	2.1	0.7	-2.0	306	4.3	3.5	-2.5	273	11.9	11.9	-0.6	261	21.8	21.5	3.3	246	29.5	27.0	11.9	253	12.2	11.7	3.6			
14	45	2.3	-1.6	-1.6	356	2.8	0.2	-2.8	310	4.5	3.4	-2.9	273	12.3	12.3	-0.7	264	26.6	26.5	2.7	257	30.6	29.8	7.1	268	17.7	17.7	0.6			
15	66	2.7	-2.5	-1.1	8	1.4	-0.2	-1.4	293	4.1	3.8	-1.6	281	11.3	11.1	-2.1	265	24.1	24.0	2.1	259	29.1	28.5	5.7	264	17.9	17.8	1.8			
16	68	2.4	-2.2	-0.9	325	1.6	0.9	-1.3	304	5.2	4.3	-2.9	275	11.0	11.0	-0.9	271	23.1	23.1	-0.3	251	28.8	27.3	9.2	255	12.8	12.3	3.4			
17	50	2.3	-1.8	-1.5	12	1.4	-0.3	-1.4	305	4.2	3.4	-2.4	274	11.2	11.2	-0.7	270	22.9	22.9	0.1	255	32.0	30.8	8.5	261	16.4	16.2	2.5			
18	54	1.4	-1.1	-0.8	3	2.0	-0.1	-2.0	304	4.7	3.9	-2.6	278	12.4	12.3	-1.8	270	23.2	23.2	0.2	259	31.1	30.5	6.2	276	17.5	17.4	-1.7			
19	59	1.7	-1.5	-0.9	340	2.0	0.7	-1.9	305	4.7	3.9	-2.7	277	12.9	12.8	-1.6	269	24.7	24.7	0.4	254	28.6	27.5	7.8	260	17.9	17.6	3.2			
20	77	1.3	-1.3	-0.3	354	1.9	0.2	-1.9	302	3.4	2.9	-1.8	287	12.1	11.6	-3.6	270	24.6	24.6	0.1	254	29.5	28.3	8.3	269	18.2	18.2	0.3			
21	54	1.4	-1.1	-0.8	5	2.4	-0.2	-2.4	304	4.6	3.8	-2.6	281	12.5	12.3	-2.3	273	23.8	23.8	-1.2	266	31.6	31.5	2.3	267	14.6	14.6	0.8			
22	117	0.7	-0.6	0.3	339	1.9	0.7	-1.8	297	5.1	4.6	-2.3	282	14.6	14.3	-3.1	270	27.9	27.9	0.2	257	30.0	29.2	6.9	268	11.0	11.0	0.4			
23	74	1.5	-1.4	-0.4	326	1.8	1.0	-1.5	292	5.4	5.0	-2.0	280	13.1	12.9	-2.2	272	26.2	26.2	-0.7	259	32.7	32.1	6.0	255	17.8	17.2	4.7			
24	82	0.7	-0.7	-0.1	308	1.8	1.4	-1.1	277	5.5	5.5	-0.7	276	14.1	14.0	-1.4	273	28.4	28.4	-1.6	262	36.7	36.3	5.1	261	20.4	20.1	3.3			
25	32	1.3	-0.7	-1.1	288	0.9	0.9	-0.3	284	5.3	5.1	-1.3	277	13.3	13.2	-1.6	275	27.4	27.3	-2.2	260	32.1	31.6	5.4	251	19.4	18.3	6.4			
26	56	1.8	-1.5	-1.0	332	1.5	0.7	-1.3	279	5.2	5.1	-0.8	273	14.1	14.1	-0.7	271	27.7	27.7	-0.7	266	34.0	33.9	2.3	253	20.0	19.2	5.7			
27	100	1.7	-1.7	0.3	280	1.1	1.1	-0.2	281	5.8	5.7	-1.1	269	14.6	14.6	0.3	272	27.5	27.5	-1.0	261	33.5	33.1	5.1	263	19.9	19.8	2.4			
28	80	1.1	-1.1	-0.2	283	1.3	1.3	-0.3	280	5.2	5.1	-0.9	281	13.9	13.6	-2.7	274	25.7	25.6	-1.7	268	32.9	32.9	1.2	271	15.9	15.9	-0.3			
29	68	1.6	-1.5	-0.6	312	1.3	1.0	-0.9	277	5.8	5.8	-0.7	270	15.8	15.8	0.0	274	27.9	27.8	-1.9	264	33.8	33.6	3.6	262	16.4	16.3	2.2			
30	63	1.6	-1.4	-0.7	310	1.7	1.3	-1.1	284	7.6	7.4	-1.8	275	17.8	17.7	-1.7	271	30.2	30.2	-0.6	261	34.1	33.7	5.1	262	17.7	17.5	2.5			
31	55	2.1	-1.7	-1.2	276	0.9	0.9	-0.1	278	6.7	6.6	-0.9	269	15.1	15.1	0.3	266	29.5	29.4	1.8	263	30.2	30.0	3.8	265	19.0	18.9	1.8			

Daily Normals of Upper Air Winds (1971-2000)

289

NEW DELHI

JANUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	312	3.8	2.8	-2.5	302	5.1	4.3	-2.7	288	8.0	7.6	-2.4	282	19.2	18.8	-3.9	272	37.8	37.8	-1.3	267	47.1	47.0	2.3	265	30.1	30.0	2.6			
2	326	1.4	0.8	-1.2	308	3.7	2.9	-2.3	290	6.7	6.3	-2.3	279	18.2	18.0	-2.7	276	36.3	36.1	-3.7	270	49.1	49.1	-0.3	270	34.0	34.0	0.2			
3	341	2.1	0.7	-2.0	307	3.8	3.0	-2.3	289	6.9	6.5	-2.2	275	19.1	19.0	-1.8	275	39.0	38.9	-3.2	271	52.4	52.4	-1.1	271	34.2	34.2	-0.6			
4	317	3.4	2.3	-2.5	297	3.9	3.5	-1.8	279	7.3	7.2	-1.1	269	19.0	19.0	0.3	269	38.9	38.9	0.4	271	49.5	49.5	-0.5	273	28.1	28.1	-1.4			
5	311	4.4	3.3	-2.9	297	4.8	4.3	-2.2	284	7.8	7.6	-1.9	279	18.7	18.5	-2.9	276	36.5	36.3	-3.8	272	48.8	48.8	-1.3	273	33.2	33.2	-1.6			
6	317	2.1	1.4	-1.5	292	4.2	3.9	-1.6	275	7.3	7.3	-0.7	277	16.2	16.1	-2.0	271	39.7	39.7	-0.7	267	51.0	50.9	3.1	272	30.9	30.9	-1.1			
7	313	2.1	1.5	-1.4	286	2.5	2.4	-0.7	266	7.4	7.4	0.5	272	16.9	16.9	-0.5	271	34.3	34.3	-0.3	269	45.0	45.0	1.0	271	28.2	28.2	-0.6			
8	261	2.6	2.6	0.4	289	4.0	3.8	-1.3	277	7.1	7.0	-0.9	273	15.7	15.7	-0.9	272	34.2	34.2	-1.2	267	43.9	43.8	2.5	263	29.8	29.6	3.4			
9	299	1.8	1.6	-0.9	296	3.9	3.5	-1.7	276	7.0	7.0	-0.7	278	18.4	18.2	-2.7	273	38.9	38.8	-2.1	266	43.8	43.7	2.7	264	38.6	38.4	3.8			
10	288	1.9	1.8	-0.6	295	3.3	3.0	-1.4	280	7.1	7.0	-1.2	273	20.2	20.2	-1.1	272	37.7	37.7	-1.4	265	46.1	45.9	4.2	265	29.2	29.1	2.5			
11	302	2.6	2.2	-1.4	291	3.4	3.2	-1.2	265	7.1	7.1	0.6	267	21.2	21.2	1.0	269	40.6	40.6	0.5	262	51.2	50.7	7.2	267	35.4	35.3	1.9			
12	312	2.5	1.9	-1.7	309	3.2	2.5	-2.0	278	7.6	7.5	-1.0	275	19.0	18.9	-1.6	276	41.0	40.8	-4.5	270	51.3	51.3	-0.3	267	35.9	35.9	1.8			
13	314	3.0	2.2	-2.1	290	3.3	3.1	-1.1	276	7.1	7.1	-0.8	273	20.4	20.4	-1.0	269	41.8	41.8	1.0	266	47.2	47.1	3.1	264	31.7	31.5	3.2			
14	315	2.0	1.4	-1.4	297	3.7	3.3	-1.7	270	8.2	8.2	0.0	270	21.5	21.5	0.0	270	43.2	43.2	-0.2	268	51.8	51.8	1.5	270	35.9	35.9	-0.1			
15	304	1.4	1.2	-0.8	284	2.9	2.8	-0.7	273	7.9	7.9	-0.4	269	20.9	20.9	0.3	268	43.3	43.3	1.6	269	48.0	48.0	0.8	273	31.8	31.8	-1.4			
16	305	3.7	3.0	-2.1	303	4.2	3.5	-2.3	282	7.9	7.7	-1.6	276	20.7	20.6	-2.2	273	43.0	42.9	-2.2	269	53.1	53.1	1.3	271	28.0	28.0	-0.5			
17	312	4.7	3.5	-3.1	313	5.1	3.7	-3.5	287	8.4	8.0	-2.5	280	20.3	20.0	-3.4	274	40.7	40.6	-2.8	271	55.3	55.3	-0.5	269	37.4	37.4	0.6			
18	309	4.4	3.4	-2.8	311	3.3	2.5	-2.2	284	6.8	6.6	-1.7	273	18.6	18.6	-0.9	272	36.5	36.5	-1.5	271	49.1	49.1	-0.8	270	39.2	39.2	0.3			
19	295	4.1	3.7	-1.7	305	3.5	2.9	-2.0	288	6.3	6.0	-1.9	276	19.7	19.6	-2.1	274	42.1	42.0	-3.2	266	50.2	50.1	3.1	270	36.2	36.2	-0.2			
20	315	3.3	2.3	-2.3	303	3.7	3.1	-2.0	272	7.2	7.2	-0.3	275	20.4	20.3	-1.9	270	38.1	38.1	0.3	264	51.3	51.0	5.4	258	28.4	27.8	5.8			
21	330	2.0	1.0	-1.7	292	2.9	2.7	-1.1	275	7.5	7.5	-0.6	270	18.8	18.8	-0.1	270	40.8	40.8	-0.3	264	53.3	53.0	5.4	265	32.3	32.2	3.1			
22	301	4.2	3.6	-2.2	299	3.8	3.3	-1.8	279	8.6	8.5	-1.3	272	20.0	20.0	-0.7	271	42.7	42.7	-0.9	268	52.1	52.1	1.6	267	30.1	30.1	1.5			
23	311	5.0	3.8	-3.3	302	5.1	4.3	-2.7	284	7.9	7.7	-1.9	278	20.3	20.1	-2.8	270	42.0	42.0	0.2	270	49.0	49.0	-0.2	266	29.8	29.7	1.9			
24	310	5.5	4.2	-3.5	299	4.7	4.1	-2.3	283	9.0	8.8	-2.0	272	21.6	21.6	-0.8	271	41.3	41.3	-0.8	270	51.4	51.4	-0.4	263	29.5	29.3	3.4			
25	318	4.8	3.2	-3.6	289	3.4	3.2	-1.1	267	9.3	9.3	0.5	267	21.4	21.4	1.1	267	45.0	44.9	2.4	266	58.9	58.8	3.9	265	34.7	34.6	3.1			
26	317	5.0	3.4	-3.7	291	3.3	3.1	-1.2	272	9.2	9.2	-0.3	265	20.7	20.6	1.9	267	41.0	40.9	2.2	265	51.8	51.6	4.7	263	34.0	33.7	4.4			
27	323	3.6	2.2	-2.9	297	3.3	2.9	-1.5	262	7.5	7.4	1.0	268	21.0	21.0	0.6	269	46.2	46.2	1.1	266	50.4	50.3	3.7	265	32.0	31.9	2.7			
28	309	3.3	2.6	-2.1	292	4.0	3.7	-1.5	271	9.2	9.2	-0.2	273	22.5	22.5	-1.1	272	43.7	43.7	-1.7	271	55.4	55.4	-0.7	270	31.7	31.7	0.2			
29	311	3.8	2.9	-2.5	298	4.7	4.2	-2.2	285	8.4	8.1	-2.2	278	22.1	21.9	-3.1	276	43.1	42.8	-4.8	269	46.5	46.5	0.9	272	29.9	29.9	-0.9			
30	307	3.4	2.7	-2.0	293	4.0	3.7	-1.6	274	7.8	7.8	-0.5	270	20.4	20.4	0.1	268	42.0	42.0	1.3	268	51.2	51.2	1.5	269	32.7	32.7	0.6			
31	325	3.5	2.0	-2.9	303	3.3	2.8	-1.8	269	7.5	7.5	0.1	272	20.9	20.9	-0.9	271	40.0	40.0	-1.0	271	49.6	49.6	-0.5	273	30.9	30.9	-1.5			

Daily Normals of Upper Air Winds (1971-2000)

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NEW DELHI

FEBRUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	313	4.1	3.0	-2.8	300	4.0	3.5	-2.0	283	8.0	7.8	-1.8	277	19.9	19.8	-2.4	273	40.2	40.1	-2.2	270	51.6	51.6	0.2	266	34.9	34.8	2.4			
2	346	1.2	0.3	-1.2	299	3.5	3.1	-1.7	285	8.6	8.3	-2.3	273	19.0	19.0	-1.0	271	38.8	38.8	-0.9	271	50.4	50.4	-1.3	268	35.7	35.7	1.3			
3	301	2.1	1.8	-1.1	302	4.1	3.5	-2.2	282	7.7	7.5	-1.6	278	19.1	18.9	-2.5	273	39.7	39.6	-2.1	272	51.0	51.0	-1.7	271	32.5	32.5	-0.8			
4	290	3.3	3.1	-1.1	290	3.8	3.6	-1.3	277	8.5	8.4	-1.0	275	21.1	21.0	-1.7	269	42.5	42.5	0.6	273	47.0	46.9	-2.5	270	32.4	32.4	-0.1			
5	292	4.5	4.2	-1.7	303	4.5	3.8	-2.5	292	8.4	7.8	-3.1	282	18.0	17.6	-3.8	276	34.4	34.2	-3.8	273	47.1	47.0	-2.3	272	29.0	29.0	-0.9			
6	317	4.2	2.9	-3.1	304	4.8	4.0	-2.7	285	7.8	7.5	-2.0	279	18.8	18.6	-2.8	277	36.0	35.7	-4.5	276	45.9	45.7	-4.7	277	30.6	30.4	-3.6			
7	305	4.0	3.3	-2.3	305	3.8	3.1	-2.2	286	8.9	8.6	-2.4	274	19.6	19.6	-1.2	273	37.0	36.9	-2.2	271	43.8	43.8	-0.7	266	29.0	28.9	2.0			
8	312	2.7	2.0	-1.8	302	4.6	3.9	-2.4	288	8.9	8.5	-2.7	282	18.7	18.3	-3.8	276	35.5	35.3	-3.8	276	43.5	43.3	-4.5	272	27.4	27.4	-1.1			
9	306	3.2	2.6	-1.9	301	4.1	3.5	-2.1	282	7.5	7.3	-1.6	285	19.1	18.5	-4.8	280	37.9	37.3	-6.7	277	44.6	44.3	-5.5	274	29.8	29.7	-2.1			
10	299	1.0	0.9	-0.5	282	4.0	3.9	-0.8	274	6.6	6.6	-0.5	274	19.3	19.3	-1.3	277	38.4	38.1	-5.0	275	46.4	46.2	-4.2	272	28.4	28.4	-0.8			
11	303	1.7	1.4	-0.9	301	4.5	3.9	-2.3	281	8.2	8.0	-1.6	276	19.3	19.2	-2.0	275	40.9	40.7	-3.7	275	47.0	46.8	-3.9	268	32.9	32.9	1.3			
12	317	4.4	3.0	-3.2	289	3.6	3.4	-1.2	280	8.0	7.9	-1.4	274	19.6	19.6	-1.2	269	41.1	41.1	0.5	269	49.7	49.7	0.9	268	34.6	34.6	1.0			
13	309	4.9	3.8	-3.1	301	3.1	2.7	-1.6	273	8.5	8.5	-0.4	268	21.0	21.0	0.7	268	38.9	38.9	1.2	267	47.8	47.8	2.1	271	32.9	32.9	-0.4			
14	280	3.5	3.4	-0.6	290	3.0	2.8	-1.0	267	7.9	7.9	0.4	266	19.9	19.8	1.5	267	38.9	38.8	2.0	267	54.2	54.1	3.3	269	27.9	27.9	0.3			
15	309	2.6	2.0	-1.6	291	2.6	2.4	-0.9	259	7.1	7.0	1.3	266	18.8	18.7	1.4	267	39.7	39.7	1.9	269	47.5	47.5	0.6	270	28.3	28.3	0.2			
16	301	3.1	2.7	-1.6	268	3.0	3.0	0.1	265	7.4	7.4	0.7	269	20.2	20.2	0.4	264	42.2	42.0	4.4	264	53.5	53.2	5.4	262	24.8	24.6	3.3			
17	308	4.8	3.8	-3.0	294	3.2	2.9	-1.3	263	7.0	7.0	0.8	271	20.2	20.2	-0.4	268	42.2	42.2	1.8	266	53.7	53.6	3.7	264	30.3	30.1	3.4			
18	287	4.1	3.9	-1.2	276	3.7	3.7	-0.4	267	7.7	7.7	0.4	269	18.7	18.7	0.4	270	40.8	40.8	0.1	266	51.1	51.0	3.6	265	34.1	33.9	3.2			
19	306	4.6	3.7	-2.7	271	4.3	4.3	-0.1	269	8.2	8.2	0.2	271	20.8	20.8	-0.3	270	42.7	42.7	0.0	264	49.9	49.7	4.9	265	31.1	31.0	2.5			
20	322	3.6	2.2	-2.8	298	4.1	3.6	-1.9	273	8.3	8.3	-0.5	273	20.5	20.5	-1.1	272	39.3	39.3	-1.3	265	53.9	53.7	4.8	268	28.8	28.8	1.2			
21	300	4.3	3.7	-2.1	301	4.1	3.5	-2.1	281	9.3	9.1	-1.7	277	19.4	19.3	-2.4	276	39.2	39.0	-4.3	266	50.1	50.0	3.4	269	37.3	37.3	0.5			
22	304	4.6	3.8	-2.6	294	5.8	5.3	-2.4	286	8.9	8.5	-2.5	280	19.9	19.6	-3.6	276	40.5	40.3	-4.1	275	50.3	50.1	-4.6	273	35.0	34.9	-2.0			
23	318	2.4	1.6	-1.8	297	4.0	3.6	-1.8	277	9.3	9.2	-1.1	274	21.0	21.0	-1.4	272	38.9	38.9	-1.6	271	49.6	49.6	-0.6	273	33.3	33.3	-1.8			
24	260	1.1	1.1	0.2	273	3.7	3.7	-0.2	272	9.8	9.8	-0.3	276	20.7	20.6	-2.2	275	41.5	41.4	-3.5	273	50.5	50.4	-2.5	272	33.1	33.1	-1.2			
25	294	2.0	1.8	-0.8	289	5.5	5.2	-1.8	279	10.8	10.7	-1.6	270	20.2	20.2	-0.1	274	40.4	40.3	-2.9	270	50.4	50.4	0.3	274	36.2	36.1	-2.3			
26	294	3.4	3.1	-1.4	292	5.3	4.9	-2.0	276	10.1	10.1	-1.0	275	19.5	19.4	-1.7	272	36.3	36.3	-1.0	271	45.4	45.4	-0.9	265	28.1	28.0	2.3			
27	312	4.7	3.5	-3.2	275	4.9	4.9	-0.4	266	9.6	9.6	0.6	273	20.2	20.2	-1.0	271	37.6	37.6	-0.5	265	47.7	47.5	4.2	268	34.9	34.9	1.5			
28	302	4.7	4.0	-2.5	282	4.3	4.2	-0.9	280	10.0	9.9	-1.7	275	20.6	20.5	-1.7	272	40.1	40.1	-1.3	269	49.9	49.9	1.0	267	30.2	30.2	1.6			
29	311	4.3	3.2	-2.8	309	8.5	6.6	-5.3	288	10.3	9.8	-3.1	267	18.9	18.9	1.0	262	38.7	38.4	5.1	258	50.0	48.8	10.7	272	23.8	23.8	-1.0			

Daily Normals of Upper Air Winds (1971-2000)

291

NEW DELHI

MARCH

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	305	4.0	3.3	-2.3	298	5.8	5.1	-2.7	283	8.2	8.0	-1.9	274	17.8	17.8	-1.2	272	34.9	34.9	-1.4	268	39.2	39.2	1.7	267	29.1	29.1	1.3			
2	303	5.3	4.4	-2.9	300	7.6	6.6	-3.8	287	8.2	7.8	-2.4	282	16.9	16.5	-3.6	273	33.9	33.9	-1.8	270	42.5	42.5	-0.3	265	27.5	27.4	2.4			
3	300	4.2	3.6	-2.1	304	6.0	5.0	-3.4	284	9.5	9.2	-2.3	279	17.5	17.3	-2.8	273	30.6	30.5	-1.8	270	38.6	38.6	-0.3	267	25.0	25.0	1.3			
4	300	3.4	3.0	-1.7	285	4.9	4.7	-1.3	270	9.4	9.4	0.0	266	19.7	19.6	1.5	266	35.9	35.8	2.5	266	42.7	42.6	3.0	266	25.9	25.9	1.6			
5	311	4.9	3.7	-3.2	288	4.1	3.9	-1.3	272	9.5	9.5	-0.3	277	18.2	18.1	-2.1	273	36.5	36.4	-2.1	270	46.4	46.4	0.4	268	26.6	26.6	0.7			
6	311	5.0	3.8	-3.3	287	5.8	5.5	-1.7	274	9.4	9.4	-0.7	274	18.3	18.3	-1.2	275	34.7	34.6	-2.8	272	45.0	45.0	-1.4	277	25.6	25.4	-3.0			
7	301	5.0	4.3	-2.6	299	5.3	4.6	-2.6	280	8.5	8.4	-1.5	273	18.7	18.7	-1.1	274	32.8	32.7	-2.2	270	44.2	44.2	-0.3	274	28.6	28.5	-1.9			
8	301	6.0	5.1	-3.1	295	5.6	5.1	-2.4	278	9.7	9.6	-1.3	269	19.1	19.1	0.5	270	34.0	34.0	-0.2	267	41.8	41.8	2.0	269	30.8	30.8	0.6			
9	303	6.2	5.2	-3.4	291	4.0	3.7	-1.4	277	8.0	7.9	-1.0	269	18.3	18.3	0.3	274	32.7	32.6	-2.4	266	44.9	44.8	3.5	264	27.8	27.7	2.7			
10	312	4.3	3.2	-2.9	277	4.7	4.7	-0.6	271	8.6	8.6	-0.2	266	18.8	18.8	1.2	265	33.9	33.8	2.8	263	43.7	43.4	5.0	270	35.1	35.1	0.0			
11	339	1.7	0.6	-1.6	275	4.5	4.5	-0.4	261	10.0	9.9	1.6	263	18.4	18.3	2.1	262	34.9	34.6	4.6	264	43.8	43.6	4.5	264	32.1	32.0	3.1			
12	314	3.9	2.8	-2.7	305	5.1	4.2	-2.9	286	9.5	9.1	-2.6	282	19.7	19.2	-4.2	281	35.6	35.0	-6.7	271	43.8	43.8	-1.0	271	29.6	29.6	-0.6			
13	290	3.7	3.5	-1.3	302	5.3	4.5	-2.8	288	9.1	8.7	-2.8	281	18.1	17.8	-3.3	283	34.8	34.0	-7.6	277	44.7	44.4	-5.2	272	27.3	27.3	-1.0			
14	310	5.3	4.1	-3.4	296	5.9	5.3	-2.6	285	8.8	8.5	-2.2	277	17.7	17.6	-2.1	277	33.2	33.0	-3.8	276	38.7	38.5	-4.1	273	27.4	27.4	-1.2			
15	317	5.0	3.4	-3.7	300	5.1	4.4	-2.5	286	8.9	8.6	-2.4	276	19.7	19.6	-2.1	276	33.6	33.4	-3.3	274	42.2	42.1	-3.1	269	27.8	27.8	0.4			
16	313	4.5	3.3	-3.1	285	3.9	3.8	-1.0	279	10.0	9.9	-1.5	276	19.4	19.3	-2.1	271	36.2	36.2	-0.6	269	46.4	46.4	0.6	268	26.5	26.5	1.1			
17	301	5.7	4.9	-3.0	291	5.9	5.5	-2.1	274	10.4	10.4	-0.8	267	18.0	18.0	0.8	270	33.8	33.8	0.2	267	42.4	42.3	2.2	268	26.6	26.6	0.9			
18	315	4.9	3.5	-3.5	292	5.3	4.9	-2.0	273	8.9	8.9	-0.4	275	18.3	18.2	-1.7	274	32.9	32.8	-2.4	269	40.3	40.3	1.0	273	24.9	24.9	-1.4			
19	310	4.5	3.5	-2.9	290	5.1	4.8	-1.7	278	9.9	9.8	-1.4	277	20.1	20.0	-2.4	274	35.5	35.4	-2.2	272	39.9	39.9	-1.4	273	24.2	24.2	-1.4			
20	295	4.4	4.0	-1.9	292	5.5	5.1	-2.1	282	8.4	8.2	-1.7	278	16.8	16.6	-2.3	274	35.3	35.2	-2.2	273	41.6	41.6	-2.0	275	29.8	29.7	-2.7			
21	321	4.0	2.5	-3.1	289	3.4	3.2	-1.1	272	8.4	8.4	-0.3	273	17.6	17.6	-1.0	273	31.5	31.5	-1.4	270	38.3	38.3	-0.2	275	22.0	21.9	-2.1			
22	301	6.0	5.1	-3.1	296	5.9	5.3	-2.6	269	9.4	9.4	0.2	273	17.0	17.0	-0.8	275	31.6	31.5	-2.5	271	40.7	40.7	-0.7	270	24.1	24.1	0.2			
23	308	3.1	2.4	-1.9	304	4.7	3.9	-2.6	273	8.9	8.9	-0.4	271	16.1	16.1	-0.3	272	31.8	31.8	-1.3	269	39.4	39.4	0.4	273	22.4	22.4	-1.1			
24	295	3.8	3.5	-1.6	289	4.3	4.1	-1.4	275	7.8	7.8	-0.7	272	14.0	14.0	-0.5	272	26.2	26.2	-1.0	270	35.4	35.4	0.0	267	23.8	23.8	1.3			
25	316	4.5	3.1	-3.2	292	3.5	3.3	-1.3	276	7.2	7.2	-0.8	277	14.9	14.8	-1.8	275	28.0	27.9	-2.2	272	34.9	34.9	-1.3	273	22.7	22.7	-1.2			
26	310	4.0	3.1	-2.6	302	4.6	3.9	-2.4	286	7.0	6.7	-1.9	281	14.7	14.4	-2.9	282	26.8	26.2	-5.4	277	34.5	34.3	-4.0	268	20.9	20.9	0.7			
27	309	5.6	4.4	-3.5	302	4.5	3.8	-2.4	289	8.9	8.4	-2.9	281	15.4	15.1	-3.0	280	29.3	28.8	-5.3	278	34.1	33.7	-5.0	274	17.1	17.1	-1.2			
28	308	3.4	2.7	-2.1	298	4.9	4.3	-2.3	278	9.0	8.9	-1.3	274	16.7	16.6	-1.3	277	26.5	26.3	-3.0	274	36.8	36.7	-2.3	274	22.5	22.4	-1.7			
29	325	3.5	2.0	-2.9	294	5.2	4.8	-2.1	280	9.0	8.9	-1.5	274	15.5	15.5	-1.0	270	30.0	30.0	0.0	271	40.4	40.4	-0.5	267	27.4	27.4	1.3			
30	313	4.0	2.9	-2.7	300	4.8	4.2	-2.4	275	9.0	9.0	-0.8	275	16.4	16.3	-1.5	270	30.8	30.8	0.0	271	37.7	37.7	-0.4	270	22.8	22.8	0.0			
31	318	5.5	3.7	-4.1	292	7.2	6.7	-2.7	281	9.2	9.0	-1.7	278	16.6	16.5	-2.2	273	27.5	27.5	-1.4	271	33.8	33.8	-0.5	272	23.9	23.9	-0.7			

Daily Normals of Upper Air Winds (1971-2000)

NEW DELHI

APRIL

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	313	4.2	3.1	-2.9	298	5.5	4.8	-2.6	283	7.9	7.7	-1.8	279	14.6	14.4	-2.2	275	28.9	28.8	-2.4	266	35.5	35.4	2.3	275	23.2	23.1	-2.1
2	325	4.7	2.7	-3.9	303	4.6	3.9	-2.5	284	7.7	7.5	-1.9	275	13.9	13.9	-1.1	272	25.8	25.8	-0.9	265	34.9	34.8	3.1	270	24.2	24.2	0.1
3	319	4.0	2.6	-3.0	301	4.5	3.9	-2.3	272	8.0	8.0	-0.3	274	16.0	16.0	-1.2	270	27.4	27.4	-0.2	271	40.1	40.1	-0.5	270	21.9	21.9	0.1
4	302	2.5	2.1	-1.3	282	4.0	3.9	-0.8	259	7.3	7.2	1.4	270	15.4	15.4	0.0	273	26.3	26.3	-1.4	268	36.8	36.8	1.6	271	24.8	24.8	-0.3
5	313	3.3	2.4	-2.2	291	4.4	4.1	-1.6	280	8.1	8.0	-1.4	276	16.2	16.1	-1.8	275	27.7	27.6	-2.2	273	36.9	36.8	-2.0	267	22.9	22.9	1.2
6	317	4.4	3.0	-3.2	299	5.7	5.0	-2.8	281	8.6	8.4	-1.7	276	16.2	16.1	-1.6	273	28.6	28.5	-1.7	272	37.5	37.5	-1.3	262	24.3	24.1	3.3
7	313	6.3	4.6	-4.3	303	6.9	5.8	-3.8	280	9.7	9.5	-1.7	273	14.4	14.4	-0.8	276	27.2	27.0	-3.0	270	40.2	40.2	0.0	267	24.7	24.7	1.5
8	305	2.4	2.0	-1.4	298	4.7	4.1	-2.2	278	7.7	7.6	-1.1	279	15.0	14.8	-2.3	274	27.2	27.1	-1.7	271	36.1	36.1	-0.7	263	19.2	19.0	2.4
9	311	3.3	2.5	-2.2	300	5.8	5.0	-2.9	279	8.7	8.6	-1.4	272	16.2	16.2	-0.6	272	27.5	27.5	-0.8	268	34.2	34.2	0.9	269	21.0	21.0	0.3
10	297	3.8	3.4	-1.7	309	6.3	4.9	-3.9	296	8.1	7.3	-3.5	284	15.2	14.8	-3.6	279	27.9	27.6	-4.3	274	37.5	37.4	-2.7	274	21.0	21.0	-1.3
11	334	3.0	1.3	-2.7	305	5.6	4.6	-3.2	286	7.1	6.8	-2.0	280	15.4	15.2	-2.7	276	26.3	26.1	-2.9	279	36.1	35.6	-5.8	272	18.8	18.8	-0.7
12	321	3.6	2.3	-2.8	303	5.7	4.8	-3.1	286	8.1	7.8	-2.3	275	14.7	14.6	-1.4	273	27.4	27.4	-1.2	276	37.1	36.9	-3.8	266	23.2	23.1	1.6
13	310	3.8	2.9	-2.4	290	5.2	4.9	-1.8	281	7.4	7.3	-1.4	282	14.4	14.1	-3.1	274	28.2	28.1	-1.8	275	39.6	39.4	-3.6	273	16.3	16.3	-0.8
14	270	0.7	0.7	0.0	294	4.4	4.0	-1.8	281	7.8	7.7	-1.5	270	13.5	13.5	-0.1	266	24.1	24.0	1.8	267	34.7	34.7	1.6	272	22.4	22.4	-0.8
15	298	1.7	1.5	-0.8	284	3.6	3.5	-0.9	274	6.3	6.3	-0.4	279	11.9	11.8	-1.8	275	24.4	24.3	-2.0	271	31.0	31.0	-0.5	273	20.3	20.3	-1.1
16	299	4.5	3.9	-2.2	301	4.9	4.2	-2.5	284	7.2	7.0	-1.8	286	13.3	12.8	-3.6	286	21.3	20.5	-5.8	279	27.7	27.4	-4.2	276	16.2	16.1	-1.7
17	310	6.7	5.1	-4.3	302	6.2	5.3	-3.3	285	9.1	8.8	-2.4	286	14.3	13.7	-4.0	278	23.9	23.7	-3.2	274	28.6	28.5	-2.0	273	15.5	15.5	-0.8
18	319	4.1	2.7	-3.1	307	5.5	4.4	-3.3	293	7.2	6.6	-2.8	284	13.2	12.8	-3.2	273	23.5	23.5	-1.3	273	29.5	29.5	-1.3	276	17.5	17.4	-1.8
19	297	8.1	7.2	-3.7	295	5.9	5.3	-2.5	283	7.2	7.0	-1.6	282	11.1	10.9	-2.3	275	21.4	21.3	-2.0	271	29.4	29.4	-0.5	276	15.6	15.5	-1.7
20	302	4.5	3.8	-2.4	310	4.8	3.7	-3.1	299	6.5	5.7	-3.1	287	11.2	10.7	-3.3	275	20.9	20.8	-1.9	274	28.7	28.6	-2.1	274	14.5	14.5	-1.0
21	301	4.9	4.2	-2.5	304	5.4	4.5	-3.0	286	7.1	6.8	-1.9	278	11.9	11.8	-1.6	266	20.3	20.3	1.3	264	28.5	28.3	3.2	273	16.9	16.9	-1.0
22	298	5.4	4.8	-2.5	303	4.5	3.8	-2.5	276	7.4	7.4	-0.8	277	12.5	12.4	-1.6	271	19.7	19.7	-0.5	271	27.4	27.4	-0.3	274	18.1	18.1	-1.2
23	320	5.0	3.2	-3.8	295	6.1	5.5	-2.6	283	8.1	7.9	-1.8	285	11.4	11.0	-2.9	276	17.9	17.8	-2.0	278	25.5	25.2	-3.6	275	13.3	13.3	-1.1
24	313	7.1	5.2	-4.9	305	6.6	5.4	-3.8	293	8.3	7.7	-3.2	291	10.7	10.0	-3.9	282	16.8	16.5	-3.4	274	25.6	25.5	-1.6	274	14.6	14.6	-1.0
25	320	5.2	3.3	-4.0	301	5.0	4.3	-2.6	285	7.1	6.9	-1.8	293	11.1	10.2	-4.4	294	16.7	15.3	-6.8	279	24.7	24.4	-3.9	278	15.9	15.7	-2.2
26	344	1.5	0.4	-1.4	286	4.0	3.8	-1.1	283	7.2	7.0	-1.6	293	10.8	10.0	-4.2	283	19.4	18.9	-4.4	278	26.0	25.7	-3.8	271	11.7	11.7	-0.2
27	329	5.2	2.7	-4.5	305	5.0	4.1	-2.9	290	8.7	8.2	-3.0	288	11.4	10.8	-3.6	276	19.4	19.3	-2.1	274	27.4	27.3	-2.1	269	17.0	17.0	0.4
28	313	5.1	3.7	-3.5	292	5.4	5.0	-2.0	282	8.2	8.0	-1.7	282	12.0	11.7	-2.5	280	21.8	21.5	-3.6	271	26.2	26.2	-0.3	274	12.8	12.8	-1.0
29	321	5.8	3.6	-4.5	300	6.6	5.7	-3.3	281	8.8	8.6	-1.7	288	12.6	12.0	-4.0	284	22.6	21.9	-5.5	276	28.3	28.2	-2.8	265	11.9	11.9	1.0
30	297	3.9	3.5	-1.8	304	5.0	4.1	-2.8	286	8.1	7.8	-2.2	288	12.2	11.6	-3.7	278	22.1	21.9	-3.1	270	29.1	29.1	0.0	265	14.8	14.7	1.4

Daily Normals of Upper Air Winds (1971-2000)

293

NEW DELHI

MAY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	279	4.6	4.5	-0.7	296	5.8	5.2	-2.5	280	7.1	7.0	-1.2	275	10.9	10.9	-1.0	273	20.1	20.1	-1.1	261	29.6	29.3	4.4	254	14.8	14.2	4.1			
2	298	4.3	3.8	-2.0	293	5.9	5.4	-2.3	281	8.1	7.9	-1.6	279	10.9	10.8	-1.7	271	21.2	21.2	-0.2	265	28.0	27.9	2.2	256	12.8	12.4	3.2			
3	279	3.7	3.7	-0.6	289	4.2	4.0	-1.4	280	8.2	8.1	-1.4	282	11.1	10.9	-2.3	271	20.8	20.8	-0.2	269	29.3	29.3	0.3	269	12.9	12.9	0.2			
4	302	2.5	2.1	-1.3	304	4.3	3.6	-2.4	285	8.1	7.8	-2.1	286	10.8	10.4	-3.0	279	22.1	21.9	-3.3	269	29.3	29.3	0.5	259	15.6	15.3	3.0			
5	296	3.4	3.1	-1.5	299	5.4	4.7	-2.6	285	6.7	6.5	-1.7	290	11.5	10.8	-4.0	277	20.0	19.9	-2.4	269	27.1	27.1	0.4	279	15.0	14.8	-2.4			
6	312	5.1	3.8	-3.4	291	4.2	3.9	-1.5	285	8.4	8.1	-2.1	290	11.0	10.3	-3.8	283	20.3	19.8	-4.6	269	27.8	27.8	0.6	267	13.0	13.0	0.6			
7	300	4.8	4.2	-2.4	294	4.2	3.8	-1.7	285	6.7	6.5	-1.8	285	11.4	11.0	-2.9	277	19.4	19.2	-2.5	275	26.3	26.2	-2.3	273	13.7	13.7	-0.6			
8	274	1.3	1.3	-0.1	289	4.2	4.0	-1.4	286	7.1	6.8	-1.9	290	11.3	10.6	-3.8	281	20.1	19.7	-4.0	273	25.8	25.8	-1.4	274	10.7	10.7	-0.8			
9	298	2.7	2.4	-1.3	300	4.3	3.7	-2.1	283	8.4	8.2	-1.9	286	13.3	12.8	-3.6	278	18.0	17.8	-2.6	272	24.2	24.2	-1.0	284	11.3	11.0	-2.7			
10	3	1.9	-0.1	-1.9	287	5.0	4.8	-1.5	281	8.3	8.1	-1.6	286	10.3	9.9	-2.9	280	17.3	17.1	-2.9	273	24.5	24.5	-1.4	270	10.3	10.3	0.0			
11	329	1.7	0.9	-1.5	300	2.8	2.4	-1.4	288	8.4	8.0	-2.6	296	13.6	12.2	-6.0	286	20.2	19.4	-5.6	271	24.2	24.2	-0.5	261	12.6	12.5	1.9			
12	333	3.3	1.5	-2.9	308	3.9	3.1	-2.4	289	8.6	8.1	-2.8	291	12.8	12.0	-4.5	285	19.1	18.4	-5.0	278	23.5	23.3	-3.3	262	9.5	9.4	1.3			
13	307	4.1	3.3	-2.5	309	4.8	3.7	-3.0	284	7.3	7.1	-1.8	289	11.5	10.9	-3.7	270	19.2	19.2	0.1	265	26.6	26.5	2.1	264	13.5	13.4	1.5			
14	313	6.9	5.1	-4.7	305	5.6	4.6	-3.2	293	7.6	7.0	-3.0	290	12.2	11.5	-4.1	270	18.2	18.2	-0.1	262	27.4	27.1	3.8	252	10.8	10.3	3.4			
15	283	5.8	5.7	-1.3	292	4.8	4.4	-1.8	285	8.7	8.4	-2.3	283	11.4	11.1	-2.6	275	21.3	21.2	-1.7	267	27.1	27.1	1.4	262	13.2	13.1	1.9			
16	307	5.9	4.7	-3.5	301	6.3	5.4	-3.3	285	8.8	8.5	-2.3	293	11.3	10.4	-4.4	271	19.0	19.0	-0.4	267	22.5	22.5	1.2	264	15.5	15.4	1.7			
17	315	5.7	4.0	-4.0	306	5.1	4.1	-3.0	284	9.8	9.5	-2.4	295	12.1	11.0	-5.1	284	20.0	19.4	-4.7	269	24.0	24.0	0.3	283	12.7	12.4	-2.9			
18	297	3.4	3.0	-1.5	298	3.8	3.4	-1.8	289	9.3	8.8	-3.0	292	13.5	12.5	-5.1	280	21.3	21.0	-3.8	274	23.8	23.7	-1.6	265	14.3	14.2	1.2			
19	307	2.0	1.6	-1.2	293	5.6	5.2	-2.2	293	8.6	7.9	-3.4	300	12.6	10.9	-6.3	284	20.0	19.4	-4.9	271	23.2	23.2	-0.4	273	8.3	8.3	-0.5			
20	324	4.4	2.6	-3.6	300	5.0	4.3	-2.5	284	7.2	7.0	-1.7	289	11.1	10.5	-3.7	279	20.7	20.5	-3.1	270	23.5	23.5	0.0	264	11.2	11.1	1.2			
21	312	4.2	3.1	-2.8	300	4.8	4.1	-2.4	292	8.2	7.6	-3.1	299	12.0	10.5	-5.8	280	19.6	19.3	-3.5	272	22.8	22.8	-0.8	268	10.7	10.7	0.4			
22	333	3.1	1.4	-2.8	305	5.5	4.5	-3.1	290	7.7	7.3	-2.6	300	12.7	11.0	-6.4	284	18.4	17.9	-4.4	271	20.4	20.4	-0.5	263	10.8	10.7	1.4			
23	287	4.2	4.0	-1.2	296	5.3	4.8	-2.3	300	8.3	7.2	-4.2	302	11.4	9.7	-6.0	287	17.0	16.3	-4.9	271	19.2	19.2	-0.4	267	8.5	8.5	0.5			
24	305	4.9	4.0	-2.8	291	5.6	5.2	-2.0	294	9.5	8.7	-3.8	302	12.3	10.5	-6.5	281	17.8	17.5	-3.4	272	18.6	18.6	-0.5	271	8.0	8.0	-0.2			
25	294	3.6	3.3	-1.5	301	4.7	4.0	-2.4	298	8.2	7.2	-3.9	304	11.9	9.8	-6.7	284	17.3	16.8	-4.2	273	19.5	19.5	-1.1	250	8.9	8.3	3.1			
26	308	3.3	2.6	-2.0	292	4.2	3.9	-1.6	290	8.3	7.8	-2.9	294	11.3	10.3	-4.6	281	17.1	16.8	-3.3	270	20.0	20.0	0.0	271	7.2	7.2	-0.1			
27	314	5.5	4.0	-3.8	307	5.5	4.4	-3.3	293	7.8	7.2	-3.1	300	10.5	9.1	-5.2	282	19.1	18.7	-3.9	269	20.0	20.0	0.2	252	6.4	6.1	2.0			
28	308	5.4	4.3	-3.3	295	6.3	5.7	-2.7	294	8.4	7.7	-3.4	297	11.1	9.9	-5.1	273	19.5	19.5	-1.1	268	22.2	22.2	0.6	259	7.0	6.9	1.4			
29	295	5.1	4.6	-2.1	294	6.4	5.8	-2.6	295	8.1	7.3	-3.4	291	10.5	9.8	-3.7	271	20.4	20.4	-0.3	263	21.1	20.9	2.7	240	9.2	8.0	4.6			
30	276	4.5	4.5	-0.5	292	5.4	5.0	-2.0	293	8.1	7.4	-3.2	298	10.7	9.4	-5.1	264	17.5	17.4	1.9	262	19.3	19.1	2.7	240	5.6	4.9	2.8			
31	306	3.6	2.9	-2.1	297	6.3	5.6	-2.9	282	7.8	7.6	-1.6	286	9.9	9.5	-2.7	269	14.9	14.9	0.2	259	18.4	18.1	3.4	252	5.9	5.6	1.8			

Daily Normals of Upper Air Winds (1971-2000)

294

NEW DELHI

JUNE

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	306	5.7	4.6	-3.4	299	6.5	5.7	-3.2	294	8.5	7.8	-3.5	298	8.6	7.6	-4.1	273	16.8	16.8	-0.9	264	20.1	20.0	2.2	246	7.0	6.4	2.8			
2	336	5.2	2.1	-4.8	312	6.4	4.8	-4.3	296	8.7	7.8	-3.8	299	9.8	8.6	-4.8	271	14.9	14.9	-0.3	260	18.1	17.8	3.2	241	6.4	5.6	3.1			
3	313	4.2	3.1	-2.9	300	5.8	5.0	-2.9	295	6.8	6.1	-2.9	289	9.0	8.5	-3.0	268	16.5	16.5	0.6	263	18.5	18.4	2.3	261	8.7	8.6	1.4			
4	340	4.9	1.7	-4.6	305	5.7	4.7	-3.3	293	7.3	6.7	-2.8	299	10.6	9.3	-5.1	274	17.3	17.3	-1.2	265	18.3	18.2	1.6	270	3.7	3.7	0.0			
5	294	2.4	2.2	-1.0	295	4.7	4.2	-2.0	297	8.6	7.7	-3.9	304	10.1	8.4	-5.6	282	16.0	15.7	-3.3	269	14.9	14.9	0.2	248	2.2	2.0	0.8			
6	315	4.4	3.1	-3.1	296	4.6	4.1	-2.0	299	7.9	6.9	-3.9	307	9.1	7.3	-5.5	278	14.9	14.8	-2.1	266	14.7	14.7	1.0	256	2.5	2.4	0.6			
7	301	6.3	5.4	-3.2	308	4.7	3.7	-2.9	307	6.3	5.0	-3.8	311	9.1	6.8	-6.0	273	13.4	13.4	-0.7	268	14.7	14.7	0.6	250	2.7	2.5	0.9			
8	290	6.6	6.2	-2.3	299	5.2	4.6	-2.5	302	7.8	6.6	-4.2	311	9.8	7.4	-6.4	271	12.2	12.2	-0.3	272	12.9	12.9	-0.5	274	2.8	2.8	-0.2			
9	323	3.0	1.8	-2.4	303	4.5	3.8	-2.5	299	9.0	7.8	-4.4	307	9.2	7.3	-5.6	281	12.6	12.4	-2.5	268	12.5	12.5	0.5	217	4.0	2.4	3.2			
10	312	3.8	2.8	-2.5	313	3.7	2.7	-2.5	291	7.0	6.5	-2.5	293	8.2	7.5	-3.2	274	13.1	13.1	-1.0	273	12.8	12.8	-0.7	270	0.9	0.9	0.0			
11	324	2.7	1.6	-2.2	303	3.8	3.2	-2.1	304	7.3	6.1	-4.1	293	9.1	8.4	-3.6	269	13.1	13.1	0.2	265	10.5	10.5	1.0	266	1.6	1.6	0.1			
12	310	3.3	2.5	-2.1	299	3.5	3.1	-1.7	296	7.2	6.5	-3.2	287	9.1	8.7	-2.6	263	12.4	12.3	1.6	264	11.3	11.2	1.1	303	3.0	2.5	-1.6			
13	326	2.9	1.6	-2.4	308	5.2	4.1	-3.2	304	8.7	7.2	-4.9	291	8.9	8.3	-3.2	263	12.4	12.3	1.6	258	13.2	12.9	2.7	173	2.4	-0.3	2.4			
14	314	2.8	2.0	-1.9	308	5.5	4.3	-3.4	302	8.1	6.9	-4.3	289	7.8	7.4	-2.6	269	12.5	12.5	0.3	264	11.0	10.9	1.2	240	2.8	2.4	1.4			
15	335	4.3	1.8	-3.9	305	5.4	4.4	-3.1	295	6.9	6.3	-2.9	296	7.9	7.1	-3.5	274	10.5	10.5	-0.7	270	9.6	9.6	0.0	211	2.3	1.2	2.0			
16	354	2.8	0.3	-2.8	303	3.8	3.2	-2.1	306	6.9	5.6	-4.0	298	7.0	6.2	-3.3	279	9.7	9.6	-1.5	266	9.2	9.2	0.7	209	1.0	0.5	0.9			
17	328	3.9	2.1	-3.3	310	3.5	2.7	-2.3	293	6.5	6.0	-2.5	307	7.6	6.1	-4.6	276	10.8	10.7	-1.2	272	7.6	7.6	-0.3	85	1.1	-1.1	-0.1			
18	332	3.2	1.5	-2.8	301	2.1	1.8	-1.1	303	6.7	5.6	-3.7	299	7.1	6.2	-3.5	281	9.5	9.3	-1.8	274	7.9	7.9	-0.5	61	1.3	-1.1	-0.6			
19	38	2.8	-1.7	-2.2	297	2.0	1.8	-0.9	299	6.2	5.4	-3.0	296	6.7	6.0	-2.9	282	8.6	8.4	-1.8	257	6.7	6.5	1.5	102	2.5	-2.4	0.5			
20	58	2.2	-1.9	-1.2	303	2.7	2.3	-1.5	303	5.3	4.4	-2.9	300	5.2	4.5	-2.6	261	7.9	7.8	1.2	260	5.6	5.5	1.0	90	1.5	-1.5	0.0			
21	90	0.3	-0.3	0.0	340	1.5	0.5	-1.4	294	4.9	4.5	-2.0	296	5.2	4.7	-2.3	254	7.1	6.8	2.0	241	7.1	6.2	3.5	92	2.5	-2.5	0.1			
22	342	0.9	0.3	-0.9	311	1.8	1.4	-1.2	307	5.9	4.7	-3.6	284	5.0	4.9	-1.2	261	6.3	6.2	1.0	246	6.4	5.8	2.6	117	3.3	-2.9	1.5			
23	249	1.9	1.8	0.7	309	3.3	2.6	-2.1	314	6.3	4.5	-4.4	304	4.0	3.3	-2.2	262	6.8	6.7	0.9	238	6.1	5.2	3.2	104	3.6	-3.5	0.9			
24	323	2.6	1.6	-2.1	309	2.8	2.2	-1.8	321	6.3	3.9	-4.9	309	4.6	3.6	-2.9	270	5.9	5.9	0.0	248	5.4	5.0	2.0	111	4.2	-3.9	1.5			
25	332	2.7	1.3	-2.4	315	3.3	2.3	-2.3	315	5.4	3.8	-3.8	308	5.2	4.1	-3.2	272	5.7	5.7	-0.2	236	4.6	3.8	2.6	94	5.9	-5.9	0.4			
26	329	0.6	0.3	-0.5	320	2.3	1.5	-1.8	321	4.6	2.9	-3.6	307	3.8	3.0	-2.3	261	4.5	4.4	0.7	241	3.5	3.1	1.7	92	4.8	-4.8	0.2			
27	32	0.9	-0.5	-0.8	297	1.1	1.0	-0.5	310	4.8	3.7	-3.1	320	3.3	2.1	-2.5	303	3.5	2.9	-1.9	217	2.0	1.2	1.6	81	5.0	-4.9	-0.8			
28	62	1.9	-1.7	-0.9	311	0.9	0.7	-0.6	321	5.4	3.4	-4.2	323	3.9	2.3	-3.1	304	3.2	2.7	-1.8	229	3.0	2.3	2.0	89	7.9	-7.9	-0.1			
29	63	1.8	-1.6	-0.8	324	1.7	1.0	-1.4	309	5.6	4.4	-3.5	317	3.8	2.6	-2.8	268	2.4	2.4	0.1	227	1.9	1.4	1.3	92	6.9	-6.9	0.2			
30	345	2.3	0.6	-2.2	323	2.1	1.3	-1.7	305	3.9	3.2	-2.2	294	3.6	3.3	-1.5	250	5.0	4.7	1.7	224	2.8	1.9	2.0	86	6.0	-6.0	-0.4			

Daily Normals of Upper Air Winds (1971-2000)

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NEW DELHI

JULY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	18	1.6	-0.5	-1.5	306	2.4	1.9	-1.4	299	4.3	3.8	-2.1	294	5.1	4.7	-2.1	263	4.1	4.1	0.5	224	4.2	2.9	3.0	79	7.0	-6.9	-1.4			
2	265	1.2	1.2	0.1	302	2.5	2.1	-1.3	299	4.3	3.8	-2.1	295	4.4	4.0	-1.9	264	4.5	4.5	0.5	236	3.4	2.8	1.9	81	7.2	-7.1	-1.1			
3	356	1.3	0.1	-1.3	282	2.5	2.4	-0.5	294	3.2	2.9	-1.3	292	2.9	2.7	-1.1	254	4.5	4.3	1.2	231	4.4	3.4	2.8	74	6.2	-6.0	-1.7			
4	300	1.4	1.2	-0.7	296	3.4	3.1	-1.5	299	4.8	4.2	-2.3	302	4.6	3.9	-2.4	256	3.8	3.7	0.9	222	2.8	1.9	2.1	79	6.3	-6.2	-1.2			
5	320	3.1	2.0	-2.4	297	3.4	3.0	-1.5	296	5.1	4.6	-2.2	306	3.4	2.8	-2.0	265	4.9	4.9	0.4	202	2.7	1.0	2.5	84	10.0	-9.9	-1.0			
6	323	3.8	2.3	-3.0	314	2.9	2.1	-2.0	305	5.1	4.2	-2.9	300	4.2	3.6	-2.1	252	3.6	3.4	1.1	192	4.3	0.9	4.2	87	8.6	-8.6	-0.4			
7	231	1.3	1.0	0.8	308	3.4	2.7	-2.1	306	4.2	3.4	-2.5	330	2.8	1.4	-2.4	273	2.2	2.2	-0.1	178	3.2	-0.1	3.2	91	8.2	-8.2	0.2			
8	173	0.8	-0.1	0.8	297	1.8	1.6	-0.8	311	3.3	2.5	-2.2	324	2.6	1.5	-2.1	193	1.7	0.4	1.7	151	4.1	-2.0	3.6	90	10.0	-10.0	0.0			
9	9	1.3	-0.2	-1.3	360	1.7	0.0	-1.7	308	2.9	2.3	-1.8	316	2.8	1.9	-2.0	172	1.5	-0.2	1.5	151	2.6	-1.3	2.3	81	11.8	-11.6	-1.9			
10	180	1.5	0.0	1.5	306	1.4	1.1	-0.8	311	3.7	2.8	-2.4	298	3.2	2.8	-1.5	262	2.2	2.2	0.3	173	2.5	-0.3	2.5	80	9.3	-9.2	-1.6			
11	321	0.6	0.4	-0.5	292	0.5	0.5	-0.2	294	2.4	2.2	-1.0	265	1.1	1.1	0.1	203	1.5	0.6	1.4	155	2.3	-1.0	2.1	87	10.3	-10.3	-0.6			
12	58	0.9	-0.8	-0.5	315	0.8	0.6	-0.6	312	1.2	0.9	-0.8	274	1.5	1.5	-0.1	198	2.5	0.8	2.4	193	1.8	0.4	1.8	78	8.4	-8.2	-1.7			
13	99	0.6	-0.6	0.1	27	1.3	-0.6	-1.2	339	1.9	0.7	-1.8	342	1.3	0.4	-1.2	6	0.9	-0.1	-0.9	155	2.1	-0.9	1.9	85	11.3	-11.3	-0.9			
14	72	1.9	-1.8	-0.6	82	0.7	-0.7	-0.1	351	1.2	0.2	-1.2	42	1.2	-0.8	-0.9	81	1.3	-1.3	-0.2	114	1.7	-1.6	0.7	84	12.8	-12.7	-1.3			
15	98	3.4	-3.4	0.5	131	1.1	-0.8	0.7	349	0.5	0.1	-0.5	120	1.6	-1.4	0.8	135	2.1	-1.5	1.5	137	3.5	-2.4	2.6	85	12.2	-12.2	-1.0			
16	87	1.8	-1.8	-0.1	166	0.8	-0.2	0.8	135	0.1	-0.1	0.1	333	0.2	0.1	-0.2	172	1.5	-0.2	1.5	117	2.2	-2.0	1.0	88	10.1	-10.1	-0.4			
17	106	1.5	-1.4	0.4	139	1.1	-0.7	0.8	338	0.5	0.2	-0.5	76	0.4	-0.4	-0.1	124	1.4	-1.2	0.8	102	2.5	-2.4	0.5	82	10.4	-10.3	-1.5			
18	166	0.8	-0.2	0.8	111	1.4	-1.3	0.5	360	1.0	0.0	-1.0	90	0.7	-0.7	0.0	130	1.6	-1.2	1.0	129	3.5	-2.7	2.2	91	11.0	-11.0	0.1			
19	135	2.5	-1.8	1.8	143	0.5	-0.3	0.4	360	1.7	0.0	-1.7	307	0.5	0.4	-0.3	129	1.4	-1.1	0.9	110	3.2	-3.0	1.1	91	10.3	-10.3	0.1			
20	158	0.5	-0.2	0.5	22	0.5	-0.2	-0.5	8	1.5	-0.2	-1.5	—	—	—	—	160	2.0	-0.7	1.9	133	4.4	-3.2	3.0	99	11.9	-11.8	1.8			
21	70	1.2	-1.1	-0.4	86	1.3	-1.3	-0.1	130	0.8	-0.6	0.5	115	1.9	-1.7	0.8	127	2.1	-1.7	1.3	95	2.5	-2.5	0.2	96	11.0	-10.9	1.2			
22	160	1.5	-0.5	1.4	157	1.3	-0.5	1.2	98	0.7	-0.7	0.1	98	0.7	-0.7	0.1	103	3.1	-3.0	0.7	104	4.0	-3.9	1.0	93	12.3	-12.3	0.7			
23	234	1.4	1.1	0.8	207	0.7	0.3	0.6	306	0.9	0.7	-0.5	45	0.4	-0.3	-0.3	141	2.8	-1.8	2.2	107	3.8	-3.6	1.1	86	11.7	-11.7	-0.8			
24	270	0.2	0.2	0.0	321	0.6	0.4	-0.5	338	1.1	0.4	-1.0	259	0.5	0.5	0.1	148	1.9	-1.0	1.6	130	4.5	-3.5	2.9	84	12.2	-12.1	-1.3			
25	297	0.2	0.2	-0.1	288	0.3	0.3	-0.1	338	1.6	0.6	-1.5	331	1.0	0.5	-0.9	176	1.6	-0.1	1.6	141	3.6	-2.3	2.8	94	9.0	-9.0	0.6			
26	312	2.4	1.8	-1.6	297	1.8	1.6	-0.8	310	3.1	2.4	-2.0	329	2.1	1.1	-1.8	99	1.2	-1.2	0.2	112	4.5	-4.2	1.7	95	12.2	-12.2	1.0			
27	75	2.0	-1.9	-0.5	248	1.1	1.0	0.4	319	2.3	1.5	-1.7	315	2.5	1.8	-1.8	108	0.9	-0.9	0.3	95	3.8	-3.8	0.3	86	11.8	-11.8	-0.9			
28	82	2.9	-2.9	-0.4	321	2.1	1.3	-1.6	327	3.7	2.0	-3.1	3	1.7	-0.1	-1.7	98	0.7	-0.7	0.1	103	4.7	-4.6	1.1	86	13.8	-13.8	-0.9			
29	99	1.8	-1.8	0.3	295	1.4	1.3	-0.6	343	1.7	0.5	-1.6	53	1.5	-1.2	-0.9	104	3.3	-3.2	0.8	119	5.3	-4.6	2.6	92	15.2	-15.2	0.6			
30	27	0.4	-0.2	-0.4	307	0.5	0.4	-0.3	332	2.7	1.3	-2.4	68	1.6	-1.5	-0.6	107	3.1	-3.0	0.9	108	5.5	-5.2	1.7	93	14.8	-14.8	0.8			
31	252	0.9	0.9	0.3	252	0.6	0.6	0.2	336	1.0	0.4	-0.9	315	0.3	0.2	-0.2	83	1.7	-1.7	-0.2	98	5.2	-5.2	0.7	80	13.2	-13.0	-2.3			

Daily Normals of Upper Air Winds (1971-2000)

NEW DELHI

AUGUST

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	304	0.7	0.6	-0.4	264	0.9	0.9	0.1	320	1.6	1.0	-1.2	43	2.3	-1.6	-1.7	66	2.7	-2.5	-1.1	82	5.6	-5.5	-0.8	83	14.2	-14.1	-1.8
2	104	0.4	-0.4	0.1	18	0.6	-0.2	-0.6	330	1.6	0.8	-1.4	357	1.8	0.1	-1.8	307	0.5	0.4	-0.3	106	2.2	-2.1	0.6	90	11.5	-11.5	0.0
3	83	1.7	-1.7	-0.2	60	0.8	-0.7	-0.4	32	1.3	-0.7	-1.1	114	1.7	-1.6	0.7	108	1.6	-1.5	0.5	99	3.2	-3.2	0.5	84	13.2	-13.1	-1.4
4	34	0.7	-0.4	-0.6	72	0.9	-0.9	-0.3	63	0.4	-0.4	-0.2	81	1.8	-1.8	-0.3	99	1.8	-1.8	0.3	82	4.1	-4.1	-0.6	86	13.2	-13.2	-0.9
5	360	0.5	0.0	-0.5	180	0.7	0.0	0.7	287	1.0	1.0	-0.3	79	0.5	-0.5	-0.1	102	2.4	-2.3	0.5	93	4.5	-4.5	0.2	94	11.9	-11.9	0.8
6	304	2.3	1.9	-1.3	281	0.5	0.5	-0.1	315	1.0	0.7	-0.7	111	1.7	-1.6	0.6	111	3.3	-3.1	1.2	84	4.4	-4.4	-0.5	94	14.4	-14.4	0.9
7	326	2.5	1.4	-2.1	42	1.2	-0.8	-0.9	51	1.3	-1.0	-0.8	77	2.7	-2.6	-0.6	101	3.6	-3.5	0.7	99	5.5	-5.4	0.9	93	14.4	-14.4	0.8
8	270	0.8	0.8	0.0	105	1.1	-1.1	0.3	37	1.5	-0.9	-1.2	75	2.8	-2.7	-0.7	90	3.8	-3.8	0.0	86	5.6	-5.6	-0.4	86	13.4	-13.4	-0.9
9	197	1.4	0.4	1.3	67	0.8	-0.7	-0.3	47	1.9	-1.4	-1.3	67	0.8	-0.7	-0.3	115	4.0	-3.6	1.7	113	6.1	-5.6	2.4	93	12.8	-12.8	0.7
10	135	2.0	-1.4	1.4	96	1.0	-1.0	0.1	24	2.2	-0.9	-2.0	32	1.3	-0.7	-1.1	108	2.9	-2.8	0.9	116	5.1	-4.6	2.2	87	10.4	-10.4	-0.6
11	114	1.2	-1.1	0.5	180	0.6	0.0	0.6	351	1.8	0.3	-1.8	27	0.9	-0.4	-0.8	180	0.6	0.0	0.6	122	3.4	-2.9	1.8	88	9.7	-9.7	-0.4
12	262	1.5	1.5	0.2	301	1.2	1.0	-0.6	323	2.1	1.3	-1.7	329	2.7	1.4	-2.3	265	1.2	1.2	0.1	169	1.6	-0.3	1.6	81	10.6	-10.5	-1.7
13	273	2.0	2.0	-0.1	243	0.2	0.2	0.1	351	1.8	0.3	-1.8	331	2.1	1.0	-1.8	163	2.4	-0.7	2.3	161	4.6	-1.5	4.4	89	8.9	-8.9	-0.1
14	285	3.1	3.0	-0.8	360	0.4	0.0	-0.4	352	1.4	0.2	-1.4	360	0.1	0.0	-0.1	176	1.6	-0.1	1.6	143	2.5	-1.5	2.0	97	10.2	-10.1	1.2
15	272	3.4	3.4	-0.1	112	0.5	-0.5	0.2	25	1.4	-0.6	-1.3	63	0.7	-0.6	-0.3	199	1.8	0.6	1.7	131	4.3	-3.2	2.8	91	9.6	-9.6	0.1
16	304	1.8	1.5	-1.0	53	1.5	-1.2	-0.9	47	2.3	-1.7	-1.6	360	1.4	0.0	-1.4	180	0.3	0.0	0.3	127	2.5	-2.0	1.5	91	9.1	-9.1	0.1
17	311	2.0	1.5	-1.3	353	0.8	0.1	-0.8	351	2.5	0.4	-2.5	297	0.7	0.6	-0.3	180	1.3	0.0	1.3	132	2.7	-2.0	1.8	91	10.4	-10.4	0.2
18	72	0.9	-0.9	-0.3	225	0.6	0.4	0.4	327	1.7	0.9	-1.4	330	0.8	0.4	-0.7	167	1.3	-0.3	1.3	137	2.5	-1.7	1.8	94	11.6	-11.6	0.9
19	29	1.3	-0.6	-1.1	90	1.1	-1.1	0.0	9	2.5	-0.4	-2.5	17	1.7	-0.5	-1.6	118	1.7	-1.5	0.8	98	2.9	-2.9	0.4	85	11.7	-11.6	-1.1
20	74	0.7	-0.7	-0.2	29	1.3	-0.6	-1.1	12	2.4	-0.5	-2.3	72	0.9	-0.9	-0.3	153	0.9	-0.4	0.8	97	2.3	-2.3	0.3	98	8.7	-8.6	1.2
21	270	1.2	1.2	0.0	292	1.6	1.5	-0.6	345	2.8	0.7	-2.7	343	1.0	0.3	-1.0	82	0.7	-0.7	-0.1	121	2.3	-2.0	1.2	101	9.3	-9.1	1.8
22	84	0.9	-0.9	-0.1	10	1.1	-0.2	-1.1	346	2.5	0.6	-2.4	301	1.2	1.0	-0.6	194	0.8	0.2	0.8	135	2.5	-1.8	1.8	95	10.1	-10.1	0.9
23	84	0.9	-0.9	-0.1	270	1.1	1.1	0.0	335	3.1	1.3	-2.8	300	2.0	1.7	-1.0	212	2.6	1.4	2.2	178	2.3	-0.1	2.3	97	9.5	-9.4	1.1
24	309	1.3	1.0	-0.8	321	1.4	0.9	-1.1	333	3.3	1.5	-2.9	297	0.9	0.8	-0.4	224	2.8	1.9	2.0	218	3.6	2.2	2.8	89	7.0	-7.0	-0.1
25	120	1.4	-1.2	0.7	342	0.9	0.3	-0.9	341	3.4	1.1	-3.2	306	1.9	1.5	-1.1	232	2.9	2.3	1.8	191	3.3	0.6	3.2	100	7.7	-7.6	1.4
26	103	2.7	-2.6	0.6	309	0.6	0.5	-0.4	337	2.6	1.0	-2.4	281	1.5	1.5	-0.3	233	3.0	2.4	1.8	196	4.4	1.2	4.2	112	7.2	-6.7	2.7
27	68	1.6	-1.5	-0.6	284	1.2	1.2	-0.3	287	1.0	1.0	-0.3	241	1.0	0.9	0.5	208	2.1	1.0	1.9	185	2.2	0.2	2.2	115	7.1	-6.4	3.0
28	336	1.0	0.4	-0.9	317	1.9	1.3	-1.4	346	2.1	0.5	-2.0	311	0.9	0.7	-0.6	233	2.0	1.6	1.2	162	1.6	-0.5	1.5	111	9.4	-8.8	3.3
29	302	0.9	0.8	-0.5	9	1.2	-0.2	-1.2	357	1.7	0.1	-1.7	247	0.8	0.7	0.3	230	3.0	2.3	1.9	198	4.0	1.2	3.8	106	6.9	-6.6	1.9
30	317	2.1	1.4	-1.5	5	1.2	-0.1	-1.2	346	1.6	0.4	-1.6	263	0.8	0.8	0.1	232	3.3	2.6	2.0	212	4.1	2.2	3.5	107	6.8	-6.5	2.0
31	346	1.6	0.4	-1.6	360	0.8	0.0	-0.8	349	3.3	0.6	-3.2	315	1.0	0.7	-0.7	227	4.0	2.9	2.7	216	3.9	2.3	3.2	111	5.7	-5.3	2.0

Daily Normals of Upper Air Winds (1971-2000)

NEW DELHI

SEPTEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	344	1.9	0.5	-1.8	12	1.4	-0.3	-1.4	360	2.8	0.0	-2.8	317	1.9	1.3	-1.4	235	3.5	2.9	2.0	217	3.1	1.9	2.5	97	5.1	-5.1	0.6
2	62	1.5	-1.3	-0.7	315	1.3	0.9	-0.9	336	2.7	1.1	-2.5	315	0.8	0.6	-0.6	234	4.1	3.3	2.4	231	2.8	2.2	1.8	120	3.9	-3.4	2.0
3	73	3.4	-3.3	-1.0	355	1.2	0.1	-1.2	345	2.4	0.6	-2.3	285	1.1	1.1	-0.3	239	3.7	3.2	1.9	249	4.5	4.2	1.6	104	6.3	-6.1	1.5
4	85	1.2	-1.2	-0.1	292	2.2	2.0	-0.8	310	2.6	2.0	-1.7	293	3.0	2.8	-1.2	259	4.8	4.7	0.9	259	4.3	4.2	0.8	99	5.5	-5.4	0.9
5	27	1.3	-0.6	-1.2	328	2.6	1.4	-2.2	331	3.7	1.8	-3.2	293	2.1	1.9	-0.8	262	5.5	5.4	0.8	240	4.4	3.8	2.2	95	5.7	-5.7	0.5
6	72	1.3	-1.2	-0.4	316	3.9	2.7	-2.8	314	4.5	3.2	-3.1	284	1.6	1.6	-0.4	256	5.4	5.2	1.3	234	4.3	3.5	2.5	100	5.9	-5.8	1.0
7	61	2.5	-2.2	-1.2	292	2.2	2.0	-0.8	321	2.8	1.8	-2.2	261	1.8	1.8	0.3	242	6.1	5.4	2.9	227	5.2	3.8	3.6	96	5.3	-5.3	0.6
8	100	4.1	-4.0	0.7	297	1.6	1.4	-0.7	309	2.6	2.0	-1.6	261	2.5	2.5	0.4	252	4.4	4.2	1.4	212	5.8	3.1	4.9	107	4.2	-4.0	1.2
9	100	2.8	-2.8	0.5	321	1.9	1.2	-1.5	323	2.6	1.6	-2.1	273	4.0	4.0	-0.2	236	6.9	5.7	3.8	230	6.7	5.2	4.3	119	3.7	-3.2	1.8
10	68	1.6	-1.5	-0.6	334	2.8	1.2	-2.5	316	3.3	2.3	-2.4	277	2.3	2.3	-0.3	240	7.3	6.3	3.6	236	8.5	7.1	4.7	125	2.8	-2.3	1.6
11	41	1.1	-0.7	-0.8	330	3.0	1.5	-2.6	330	3.9	2.0	-3.4	278	2.8	2.8	-0.4	248	8.5	7.9	3.2	233	8.1	6.5	4.9	147	2.7	-1.5	2.3
12	329	2.7	1.4	-2.3	316	3.2	2.2	-2.3	316	4.3	3.0	-3.1	294	3.7	3.4	-1.5	251	8.5	8.0	2.8	248	8.2	7.6	3.0	99	1.8	-1.8	0.3
13	318	1.5	1.0	-1.1	321	3.3	2.1	-2.6	331	3.9	1.9	-3.4	289	3.1	2.9	-1.0	259	8.8	8.6	1.7	251	8.8	8.3	2.8	106	2.5	-2.4	0.7
14	351	2.6	0.4	-2.6	315	3.8	2.7	-2.7	320	5.2	3.3	-4.0	292	3.8	3.5	-1.4	254	9.3	9.0	2.5	252	9.5	9.0	2.9	183	2.1	0.1	2.1
15	341	1.8	0.6	-1.7	325	4.2	2.4	-3.4	315	4.8	3.4	-3.4	305	4.4	3.6	-2.5	252	8.7	8.3	2.7	247	9.3	8.6	3.6	149	1.2	-0.6	1.0
16	330	3.4	1.7	-2.9	321	3.2	2.0	-2.5	330	3.8	1.9	-3.3	276	3.7	3.7	-0.4	257	9.9	9.7	2.2	250	11.6	10.9	4.0	210	2.8	1.4	2.4
17	315	3.3	2.3	-2.3	309	4.3	3.3	-2.7	311	4.6	3.5	-3.0	276	3.6	3.6	-0.4	257	7.7	7.5	1.8	245	9.0	8.2	3.8	159	2.8	-1.0	2.6
18	341	2.8	0.9	-2.6	305	4.4	3.6	-2.5	309	4.5	3.5	-2.8	285	3.1	3.0	-0.8	257	9.5	9.3	2.1	247	11.2	10.3	4.3	208	2.1	1.0	1.9
19	336	3.6	1.5	-3.3	314	3.9	2.8	-2.7	317	4.7	3.2	-3.4	279	4.0	4.0	-0.6	252	11.3	10.7	3.5	245	13.1	11.9	5.5	190	4.2	0.7	4.1
20	315	1.8	1.3	-1.3	317	3.4	2.3	-2.5	323	4.0	2.4	-3.2	275	3.7	3.7	-0.3	252	11.8	11.2	3.6	245	13.1	11.9	5.5	239	3.3	2.8	1.7
21	335	2.6	1.1	-2.4	312	3.8	2.8	-2.5	309	4.0	3.1	-2.5	274	4.4	4.4	-0.3	250	12.1	11.4	4.2	254	15.6	15.0	4.4	231	4.0	3.1	2.5
22	328	4.5	2.4	-3.8	326	2.9	1.6	-2.4	310	3.8	2.9	-2.4	285	4.7	4.5	-1.2	250	13.7	12.9	4.7	254	15.2	14.6	4.2	221	5.2	3.4	3.9
23	339	3.1	1.1	-2.9	333	2.2	1.0	-2.0	323	3.5	2.1	-2.8	270	4.9	4.9	0.0	254	12.8	12.3	3.6	256	14.4	14.0	3.4	234	5.4	4.4	3.2
24	318	4.2	2.8	-3.1	328	2.6	1.4	-2.2	312	4.7	3.5	-3.1	286	5.8	5.6	-1.6	257	14.1	13.7	3.2	252	15.3	14.6	4.7	259	2.6	2.6	0.5
25	326	6.2	3.5	-5.1	320	3.4	2.2	-2.6	313	5.0	3.6	-3.4	282	7.1	6.9	-1.5	257	14.5	14.1	3.3	258	16.5	16.1	3.4	252	4.8	4.6	1.5
26	316	5.5	3.8	-4.0	299	4.8	4.2	-2.3	304	5.7	4.7	-3.2	288	6.7	6.4	-2.1	261	14.9	14.7	2.4	261	16.6	16.4	2.6	262	5.9	5.8	0.8
27	325	3.8	2.2	-3.1	314	4.0	2.9	-2.8	320	5.1	3.3	-3.9	285	6.2	6.0	-1.6	259	14.9	14.6	2.9	259	17.7	17.4	3.5	262	5.8	5.7	0.8
28	327	4.6	2.5	-3.9	319	3.7	2.4	-2.8	308	4.6	3.6	-2.8	285	6.4	6.2	-1.7	259	16.0	15.7	3.1	254	16.9	16.2	4.7	246	7.7	7.0	3.1
29	337	4.7	1.8	-4.3	322	3.9	2.4	-3.1	311	7.2	5.4	-4.7	281	6.4	6.3	-1.2	258	16.6	16.2	3.4	256	19.0	18.4	4.7	252	7.0	6.6	2.2
30	328	3.4	1.8	-2.9	315	4.4	3.1	-3.1	312	5.8	4.3	-3.9	286	7.7	7.4	-2.1	260	17.6	17.3	3.0	255	18.0	17.4	4.5	250	7.1	6.7	2.4

Daily Normals of Upper Air Winds (1971-2000)

NEW DELHI

OCTOBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	344	4.3	1.2	-4.1	319	4.9	3.2	-3.7	314	6.4	4.6	-4.4	273	7.5	7.5	-0.4	255	17.6	17.0	4.5	257	20.4	19.9	4.6	249	10.3	9.6	3.7
2	330	2.4	1.2	-2.1	320	4.0	2.6	-3.1	311	5.3	4.0	-3.5	279	8.1	8.0	-1.3	260	16.4	16.1	2.9	255	21.1	20.4	5.5	237	8.1	6.8	4.4
3	340	3.3	1.1	-3.1	324	4.1	2.4	-3.3	317	5.6	3.8	-4.1	279	8.6	8.5	-1.4	261	17.6	17.4	2.9	259	22.1	21.7	4.4	242	7.2	6.3	3.4
4	326	0.4	0.2	-0.3	325	3.7	2.1	-3.0	318	5.2	3.5	-3.9	286	7.4	7.1	-2.1	261	17.2	17.0	2.8	256	21.6	20.9	5.3	247	9.7	8.9	3.8
5	347	1.8	0.4	-1.8	319	4.0	2.6	-3.0	312	4.5	3.3	-3.0	290	7.1	6.7	-2.4	259	18.5	18.1	3.6	258	21.5	21.0	4.6	242	8.1	7.1	3.8
6	345	3.1	0.8	-3.0	317	4.4	3.0	-3.2	308	4.9	3.9	-3.0	288	8.0	7.6	-2.4	261	18.1	17.9	2.7	256	20.6	20.0	4.9	251	7.2	6.8	2.4
7	336	4.5	1.8	-4.1	321	4.1	2.6	-3.2	302	5.3	4.5	-2.8	280	8.5	8.4	-1.5	260	18.3	18.0	3.3	258	22.0	21.5	4.6	253	13.3	12.7	4.0
8	333	4.7	2.1	-4.2	318	4.2	2.8	-3.1	301	5.4	4.6	-2.8	282	8.0	7.8	-1.6	263	21.8	21.6	2.8	258	25.8	25.2	5.4	256	11.7	11.3	2.9
9	334	3.9	1.7	-3.5	304	4.6	3.8	-2.6	300	5.9	5.1	-3.0	283	11.1	10.8	-2.4	270	22.1	22.1	0.0	264	25.7	25.6	2.6	261	11.7	11.6	1.8
10	334	3.9	1.7	-3.5	313	4.7	3.4	-3.2	318	6.3	4.2	-4.7	280	10.6	10.4	-1.9	267	23.3	23.3	1.2	263	27.1	26.9	3.3	263	13.0	12.9	1.6
11	356	2.7	0.2	-2.7	313	3.5	2.6	-2.4	307	5.6	4.5	-3.4	279	10.6	10.5	-1.6	264	22.3	22.2	2.4	258	26.6	26.0	5.5	258	13.0	12.7	2.8
12	347	3.6	0.8	-3.5	316	3.2	2.2	-2.3	300	5.8	5.0	-2.9	277	10.4	10.3	-1.3	262	23.7	23.5	3.1	261	26.9	26.6	4.2	261	14.2	14.0	2.2
13	328	3.1	1.6	-2.6	302	3.9	3.3	-2.1	310	5.7	4.4	-3.7	279	9.3	9.2	-1.5	265	21.3	21.2	1.7	254	28.7	27.6	7.7	257	16.6	16.2	3.6
14	318	5.0	3.3	-3.7	323	3.4	2.0	-2.7	300	6.2	5.4	-3.1	287	9.8	9.4	-2.8	266	24.7	24.6	1.8	261	30.1	29.7	4.9	259	17.0	16.7	3.2
15	328	4.9	2.6	-4.2	316	3.6	2.5	-2.6	302	4.9	4.2	-2.6	276	9.3	9.3	-0.9	265	24.0	23.9	2.3	263	31.5	31.2	4.1	259	16.0	15.7	3.0
16	346	3.0	0.7	-2.9	323	4.1	2.5	-3.3	290	4.8	4.5	-1.6	280	11.1	10.9	-1.9	263	27.2	27.0	3.1	257	32.6	31.7	7.4	255	15.5	15.0	4.0
17	345	3.4	0.9	-3.3	310	4.2	3.2	-2.7	303	4.9	4.1	-2.7	280	11.1	10.9	-1.9	266	25.7	25.6	1.9	260	29.3	28.9	5.0	259	17.9	17.6	3.4
18	328	2.8	1.5	-2.4	315	3.0	2.1	-2.1	290	4.6	4.3	-1.6	285	11.8	11.4	-3.0	263	25.9	25.7	3.3	259	31.6	31.0	6.3	257	15.9	15.5	3.5
19	321	3.8	2.4	-3.0	311	4.3	3.2	-2.8	298	5.2	4.6	-2.4	282	10.8	10.6	-2.3	264	25.0	24.9	2.6	259	30.4	29.9	5.6	263	15.7	15.6	2.0
20	333	2.9	1.3	-2.6	317	5.1	3.5	-3.7	302	6.2	5.2	-3.3	279	10.3	10.2	-1.6	269	28.4	28.4	0.4	266	33.9	33.8	2.3	265	17.1	17.0	1.4
21	329	4.1	2.1	-3.5	311	5.3	4.0	-3.5	305	6.3	5.2	-3.6	285	11.3	10.9	-3.0	268	26.9	26.9	0.8	264	31.5	31.3	3.5	266	14.0	14.0	1.0
22	325	4.5	2.6	-3.7	313	4.2	3.1	-2.9	303	6.1	5.1	-3.3	280	11.2	11.0	-2.0	265	27.0	26.9	2.3	267	34.2	34.1	1.9	262	15.1	15.0	2.1
23	322	3.6	2.2	-2.8	313	4.1	3.0	-2.8	297	5.7	5.1	-2.6	278	10.2	10.1	-1.4	265	27.6	27.5	2.3	265	34.5	34.4	2.8	266	15.5	15.5	1.1
24	326	2.9	1.6	-2.4	308	3.9	3.1	-2.4	296	5.3	4.8	-2.3	279	10.9	10.8	-1.8	265	28.1	28.0	2.4	264	36.5	36.3	3.7	264	20.6	20.5	2.3
25	346	3.0	0.7	-2.9	311	4.0	3.0	-2.6	298	5.8	5.1	-2.7	292	11.7	10.9	-4.3	267	29.4	29.4	1.6	264	37.9	37.7	3.9	269	19.5	19.5	0.4
26	340	3.7	1.3	-3.5	308	4.1	3.2	-2.5	296	5.9	5.3	-2.6	285	10.6	10.2	-2.7	266	25.4	25.3	1.6	267	35.8	35.7	2.1	269	17.3	17.3	0.2
27	328	4.7	2.5	-4.0	308	4.1	3.2	-2.5	302	6.0	5.1	-3.2	286	10.6	10.2	-3.0	265	25.5	25.4	2.1	261	35.5	35.1	5.6	269	15.8	15.8	0.2
28	335	4.0	1.7	-3.6	318	3.9	2.6	-2.9	308	5.5	4.3	-3.4	290	9.5	8.9	-3.2	268	25.4	25.4	1.0	261	34.2	33.8	5.4	267	16.3	16.3	0.8
29	331	3.8	1.8	-3.3	316	4.5	3.1	-3.2	299	5.1	4.5	-2.5	292	10.6	9.9	-3.9	278	22.7	22.5	-3.3	268	31.2	31.2	1.3	270	13.8	13.8	0.1
30	321	4.1	2.6	-3.2	306	4.2	3.4	-2.5	299	5.6	4.9	-2.7	283	10.5	10.2	-2.4	265	24.6	24.5	2.2	261	35.2	34.7	5.7	263	16.9	16.8	2.2
31	322	2.4	1.5	-1.9	314	3.6	2.6	-2.5	305	5.5	4.5	-3.1	282	10.1	9.9	-2.1	274	26.3	26.2	-1.7	266	33.0	32.9	2.4	268	17.8	17.8	0.6

Daily Normals of Upper Air Winds (1971-2000)

299

NEW DELHI

NOVEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	326	2.5	1.4	-2.1	308	3.6	2.8	-2.2	302	5.2	4.4	-2.7	282	11.3	11.0	-2.4	275	27.4	27.3	-2.5	268	33.9	33.9	1.2	269	17.4	17.4	0.3			
2	314	4.5	3.2	-3.1	312	4.2	3.1	-2.8	310	6.1	4.7	-3.9	288	12.9	12.3	-3.9	278	28.0	27.7	-3.8	271	33.5	33.5	-0.6	274	18.2	18.2	-1.3			
3	319	2.8	1.8	-2.1	306	4.1	3.3	-2.4	302	6.1	5.2	-3.2	287	12.4	11.8	-3.7	276	28.6	28.5	-2.9	268	35.8	35.8	1.1	274	18.7	18.7	-1.2			
4	338	1.8	0.7	-1.7	309	4.5	3.5	-2.8	297	6.3	5.6	-2.9	291	13.0	12.2	-4.6	280	28.8	28.3	-5.2	274	35.4	35.3	-2.3	272	23.3	23.3	-0.9			
5	319	2.8	1.8	-2.1	315	4.4	3.1	-3.1	301	5.5	4.7	-2.8	287	12.9	12.3	-3.8	282	30.0	29.4	-6.0	272	36.3	36.3	-1.4	269	21.9	21.9	0.2			
6	339	2.5	0.9	-2.3	306	4.2	3.4	-2.5	297	6.0	5.4	-2.7	286	14.9	14.3	-4.1	275	29.2	29.1	-2.3	268	36.6	36.6	1.0	270	21.0	21.0	0.1			
7	321	2.1	1.3	-1.6	316	4.5	3.1	-3.2	301	6.0	5.1	-3.1	283	14.2	13.9	-3.1	271	29.8	29.8	-0.4	265	38.2	38.0	3.5	269	24.9	24.9	0.4			
8	312	2.7	2.0	-1.8	304	4.1	3.4	-2.3	307	5.3	4.2	-3.2	280	12.1	11.9	-2.2	270	29.6	29.6	0.2	265	38.8	38.7	3.2	272	23.7	23.7	-0.9			
9	331	3.3	1.6	-2.9	316	4.5	3.1	-3.2	298	6.9	6.1	-3.2	283	13.5	13.1	-3.1	273	28.9	28.9	-1.7	270	37.6	37.6	0.1	270	24.3	24.3	-0.2			
10	315	4.2	3.0	-3.0	313	5.0	3.6	-3.4	303	6.7	5.6	-3.7	287	12.1	11.5	-3.6	275	26.4	26.3	-2.1	268	36.7	36.7	1.5	269	21.1	21.1	0.4			
11	325	3.9	2.2	-3.2	315	3.5	2.5	-2.5	300	6.1	5.3	-3.1	283	13.9	13.5	-3.1	277	30.5	30.3	-3.9	272	38.6	38.6	-1.4	271	21.2	21.2	-0.3			
12	306	2.4	1.9	-1.4	312	4.0	3.0	-2.7	300	5.4	4.7	-2.7	288	16.0	15.2	-5.0	276	32.5	32.3	-3.4	274	38.4	38.3	-3.0	271	21.1	21.1	-0.3			
13	317	3.4	2.3	-2.5	314	4.9	3.5	-3.4	311	6.6	5.0	-4.3	287	14.2	13.6	-4.2	277	30.4	30.2	-3.8	271	40.1	40.1	-0.9	275	20.4	20.3	-1.9			
14	311	2.9	2.2	-1.9	307	4.9	3.9	-2.9	299	6.8	6.0	-3.3	286	14.8	14.2	-4.0	272	29.5	29.5	-1.1	270	39.2	39.2	0.2	271	21.0	21.0	-0.5			
15	325	3.9	2.2	-3.2	311	4.1	3.1	-2.7	299	6.3	5.5	-3.1	282	13.8	13.5	-2.8	272	30.2	30.2	-0.9	267	39.7	39.7	1.9	274	21.1	21.1	-1.4			
16	318	2.8	1.9	-2.1	305	4.2	3.4	-2.4	292	5.1	4.7	-1.9	272	14.6	14.6	-0.5	268	31.7	31.7	1.2	261	40.7	40.2	6.1	267	25.6	25.6	1.3			
17	317	2.6	1.8	-1.9	305	3.3	2.7	-1.9	291	5.0	4.7	-1.8	272	14.4	14.4	-0.5	264	31.7	31.5	3.4	262	42.1	41.7	6.0	263	27.1	26.9	3.5			
18	326	3.0	1.7	-2.5	307	3.6	2.9	-2.2	296	6.6	5.9	-2.9	277	14.9	14.8	-1.7	266	31.8	31.7	2.2	260	37.3	36.7	6.8	266	27.4	27.3	2.1			
19	330	2.8	1.4	-2.4	311	4.6	3.5	-3.0	297	5.6	5.0	-2.5	276	13.4	13.3	-1.4	268	31.1	31.1	1.0	260	42.4	41.8	7.0	261	25.5	25.2	3.8			
20	315	3.3	2.3	-2.3	310	4.5	3.5	-2.9	297	5.7	5.1	-2.6	283	14.1	13.8	-3.1	272	31.2	31.2	-1.3	262	40.9	40.5	5.9	266	27.7	27.6	2.0			
21	338	1.6	0.6	-1.5	316	3.9	2.7	-2.8	298	5.9	5.2	-2.8	274	15.2	15.2	-1.1	266	33.4	33.3	2.6	260	39.8	39.2	7.1	265	22.0	21.9	2.1			
22	323	1.5	0.9	-1.2	307	3.0	2.4	-1.8	292	4.5	4.2	-1.7	272	14.5	14.5	-0.5	267	29.0	29.0	1.3	264	39.2	39.0	4.0	264	22.3	22.2	2.3			
23	319	4.4	2.9	-3.3	314	3.6	2.6	-2.5	291	5.8	5.4	-2.1	280	13.3	13.1	-2.2	274	30.1	30.0	-1.9	268	39.3	39.3	1.5	270	20.2	20.2	-0.1			
24	319	6.4	4.2	-4.8	308	4.6	3.6	-2.8	289	5.7	5.4	-1.9	276	15.3	15.2	-1.5	270	32.5	32.5	-0.1	266	39.4	39.3	2.9	276	25.9	25.8	-2.7			
25	313	5.9	4.3	-4.0	315	4.7	3.3	-3.3	293	5.3	4.9	-2.1	278	16.3	16.1	-2.4	272	32.6	32.6	-1.3	269	41.9	41.9	0.4	278	28.5	28.2	-4.1			
26	306	4.4	3.6	-2.6	300	4.0	3.5	-2.0	293	5.7	5.3	-2.2	277	15.6	15.5	-1.8	270	37.3	37.3	-0.2	268	43.8	43.8	1.7	269	26.8	26.8	0.7			
27	309	3.5	2.7	-2.2	308	3.7	2.9	-2.3	285	7.4	7.2	-1.9	272	16.4	16.4	-0.5	271	35.5	35.5	-0.9	264	43.8	43.6	4.2	266	22.5	22.5	1.4			
28	314	3.3	2.4	-2.3	315	4.0	2.8	-2.8	309	5.7	4.4	-3.6	285	16.7	16.2	-4.2	271	31.9	31.9	-0.7	263	40.6	40.3	4.6	268	28.7	28.7	1.0			
29	316	3.3	2.3	-2.4	310	4.8	3.7	-3.1	302	6.4	5.4	-3.4	277	17.2	17.1	-2.0	268	33.7	33.7	1.1	260	41.8	41.2	7.2	260	24.8	24.5	4.1			
30	318	4.7	3.1	-3.5	318	4.2	2.8	-3.1	299	7.1	6.2	-3.5	279	16.4	16.2	-2.6	270	35.3	35.3	-0.2	266	41.2	41.1	3.2	266	26.2	26.1	1.9			

Daily Normals of Upper Air Winds (1971-2000)

300

NEW DELHI

DECEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	312	4.0	3.0	-2.7	315	4.4	3.1	-3.1	301	6.0	5.1	-3.1	280	16.7	16.4	-2.9	269	33.8	33.8	0.3	265	44.3	44.2	3.6	261	29.2	28.8	4.6			
2	312	4.5	3.3	-3.0	313	3.4	2.5	-2.3	295	5.4	4.9	-2.3	270	15.2	15.2	-0.1	266	31.2	31.1	2.1	266	40.4	40.3	3.1	267	27.1	27.1	1.5			
3	321	2.8	1.8	-2.2	316	3.5	2.4	-2.5	292	6.4	5.9	-2.4	274	16.0	16.0	-1.2	270	31.7	31.7	0.0	265	43.4	43.2	3.9	265	29.5	29.4	2.5			
4	313	4.5	3.3	-3.1	315	5.5	3.9	-3.9	295	7.1	6.4	-3.0	273	16.0	16.0	-0.8	267	33.6	33.6	1.7	262	46.0	45.5	6.7	261	28.6	28.3	4.3			
5	320	4.7	3.0	-3.6	317	5.3	3.6	-3.9	289	6.9	6.5	-2.2	277	16.9	16.8	-2.2	268	32.1	32.1	1.0	264	44.6	44.3	5.0	265	30.2	30.1	2.7			
6	324	3.7	2.2	-3.0	318	5.5	3.7	-4.1	296	6.4	5.7	-2.8	277	14.7	14.6	-1.7	269	32.3	32.3	0.7	265	40.3	40.2	3.3	264	32.0	31.8	3.2			
7	323	5.0	3.0	-4.0	317	5.2	3.5	-3.8	291	6.9	6.4	-2.5	275	16.8	16.7	-1.4	269	33.0	33.0	0.3	266	45.6	45.5	3.3	266	34.4	34.3	2.5			
8	300	2.4	2.1	-1.2	308	3.6	2.8	-2.2	284	7.0	6.8	-1.7	274	17.2	17.2	-1.2	267	31.7	31.7	1.7	266	41.9	41.8	3.2	265	28.2	28.1	2.3			
9	291	5.3	4.9	-1.9	306	4.6	3.7	-2.7	282	6.8	6.7	-1.4	275	17.0	16.9	-1.4	269	31.8	31.8	0.8	263	41.4	41.1	4.7	263	22.8	22.6	2.8			
10	316	3.9	2.7	-2.8	316	4.6	3.2	-3.3	296	7.2	6.5	-3.2	278	17.8	17.6	-2.4	272	36.2	36.2	-1.0	268	44.4	44.4	1.7	267	28.7	28.7	1.6			
11	316	4.2	2.9	-3.0	317	4.7	3.2	-3.4	307	7.1	5.7	-4.3	284	17.5	17.0	-4.2	272	37.3	37.3	-1.6	265	45.1	44.9	3.8	262	33.4	33.1	4.4			
12	308	3.6	2.8	-2.2	301	4.7	4.0	-2.4	291	7.7	7.2	-2.7	280	16.7	16.4	-2.9	274	35.7	35.6	-2.7	267	42.3	42.3	2.0	273	35.3	35.2	-2.1			
13	307	5.1	4.1	-3.1	307	5.4	4.3	-3.2	291	9.0	8.4	-3.2	282	18.9	18.5	-4.1	274	34.3	34.2	-2.6	266	43.1	43.0	2.7	273	28.8	28.8	-1.4			
14	305	4.4	3.6	-2.5	305	4.0	3.3	-2.3	290	7.3	6.9	-2.5	279	17.2	17.0	-2.6	271	34.0	34.0	-0.7	270	40.5	40.5	0.3	274	31.6	31.5	-2.1			
15	312	5.5	4.1	-3.7	309	5.1	4.0	-3.2	291	6.6	6.2	-2.4	281	16.7	16.4	-3.1	273	34.8	34.7	-2.1	271	42.1	42.1	-0.8	271	29.0	29.0	-0.5			
16	309	2.8	2.2	-1.8	310	4.5	3.4	-2.9	296	6.1	5.5	-2.7	274	14.9	14.9	-1.1	268	31.5	31.5	1.2	272	44.0	44.0	-1.2	266	29.4	29.3	2.1			
17	319	3.3	2.2	-2.5	312	5.1	3.8	-3.4	291	8.5	7.9	-3.0	280	16.9	16.6	-2.9	276	32.6	32.4	-3.2	269	43.0	43.0	0.7	269	31.2	31.2	0.4			
18	310	3.5	2.7	-2.3	309	4.5	3.5	-2.8	292	8.0	7.4	-3.0	281	16.6	16.3	-3.1	277	33.7	33.5	-3.9	269	43.2	43.2	0.9	270	30.5	30.5	-0.1			
19	315	3.1	2.2	-2.2	302	4.1	3.5	-2.2	289	6.9	6.5	-2.3	277	16.6	16.5	-2.0	270	35.4	35.4	-0.3	267	47.9	47.9	2.1	269	31.4	31.4	0.8			
20	317	2.6	1.8	-1.9	287	3.4	3.2	-1.0	280	7.0	6.9	-1.2	278	18.4	18.2	-2.6	272	35.7	35.7	-1.2	262	44.1	43.7	6.1	266	29.9	29.8	2.2			
21	316	3.2	2.2	-2.3	313	3.8	2.8	-2.6	293	6.6	6.1	-2.6	276	18.3	18.2	-1.9	272	37.0	37.0	-1.1	267	46.7	46.6	2.8	268	27.3	27.3	1.0			
22	313	2.6	1.9	-1.8	297	3.7	3.3	-1.7	283	6.5	6.3	-1.4	272	17.4	17.4	-0.6	271	35.0	35.0	-0.4	266	46.4	46.3	3.3	266	31.0	30.9	2.2			
23	319	3.3	2.2	-2.5	302	4.4	3.7	-2.3	290	7.2	6.7	-2.5	277	19.3	19.2	-2.2	270	36.6	36.6	-0.3	266	47.2	47.1	2.9	263	29.6	29.4	3.6			
24	323	2.5	1.5	-2.0	316	3.5	2.4	-2.5	288	6.6	6.3	-2.1	274	15.7	15.7	-1.0	273	35.1	35.1	-1.8	272	47.0	47.0	-1.3	270	33.5	33.5	-0.1			
25	333	2.9	1.3	-2.6	312	2.7	2.0	-1.8	273	6.7	6.7	-0.4	272	16.8	16.8	-0.5	271	36.4	36.4	-0.9	266	47.4	47.3	3.2	270	28.9	28.9	-0.2			
26	322	3.4	2.1	-2.7	302	3.1	2.6	-1.6	275	5.5	5.5	-0.5	274	17.7	17.7	-1.3	276	37.2	37.0	-3.9	274	48.1	48.0	-3.0	273	29.8	29.7	-1.8			
27	315	4.0	2.8	-2.8	303	3.3	2.8	-1.8	275	5.6	5.6	-0.5	277	17.5	17.4	-2.0	271	35.5	35.5	-0.8	271	44.2	44.2	-0.8	277	27.4	27.2	-3.4			
28	319	1.8	1.2	-1.4	303	3.1	2.6	-1.7	278	7.5	7.4	-1.1	271	19.1	19.1	-0.4	271	36.0	36.0	-0.7	271	45.8	45.8	-0.4	271	36.7	36.7	-0.4			
29	312	2.4	1.8	-1.6	297	3.9	3.5	-1.8	274	7.2	7.2	-0.5	273	20.0	20.0	-1.2	274	39.5	39.4	-3.0	274	48.7	48.6	-3.4	268	31.2	31.2	0.9			
30	304	3.7	3.1	-2.1	309	4.8	3.7	-3.0	288	8.0	7.6	-2.5	279	20.1	19.9	-3.0	274	37.4	37.3	-2.9	269	44.2	44.2	0.5	267	28.3	28.3	1.5			
31	321	2.7	1.7	-2.1	312	3.6	2.7	-2.4	283	7.2	7.0	-1.6	271	19.2	19.2	-0.4	270	36.0	36.0	-0.1	268	46.5	46.5	1.5	269	35.5	35.5	0.8			

Daily Normals of Upper Air Winds (1971-2000)

301

PATIALA

JANUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	311	3.8	2.9	-2.5	303	3.7	3.1	-2.0	296	4.3	3.9	-1.9	285	14.4	13.9	-3.6	278	32.8	32.5	-4.4	271	43.8	43.8	-0.5	269	26.9	26.9	0.6			
2	312	3.0	2.2	-2.0	327	3.5	1.9	-2.9	291	3.3	3.1	-1.2	281	12.9	12.7	-2.5	279	29.6	29.3	-4.5	281	42.0	41.3	-7.7	264	36.2	36.0	3.7			
3	307	3.0	2.4	-1.8	326	2.9	1.6	-2.4	268	2.5	2.5	0.1	279	15.3	15.1	-2.3	273	37.7	37.6	-2.2	275	47.3	47.1	-3.8	290	44.3	41.7	-14.9			
4	318	2.8	1.9	-2.1	326	1.4	0.8	-1.2	249	2.2	2.1	0.8	269	13.6	13.6	0.3	281	31.5	30.9	-6.1	273	41.2	41.2	-1.9	264	25.5	25.4	2.6			
5	322	4.1	2.5	-3.2	313	1.9	1.4	-1.3	276	2.7	2.7	-0.3	277	11.9	11.8	-1.5	276	23.6	23.5	-2.5	266	34.4	34.3	2.6	267	28.8	28.8	1.3			
6	360	0.7	0.0	-0.7	45	0.3	-0.2	-0.2	261	2.4	2.4	0.4	270	12.6	12.6	0.1	270	28.8	28.8	0.1	269	39.6	39.6	0.9	278	31.2	30.9	-4.6			
7	279	1.3	1.3	-0.2	236	0.7	0.6	0.4	229	2.8	2.1	1.8	265	12.1	12.1	1.1	269	22.8	22.8	0.2	276	37.1	36.9	-4.0	279	27.8	27.5	-4.2			
8	314	3.5	2.5	-2.4	329	0.6	0.3	-0.5	248	2.4	2.2	0.9	275	13.4	13.4	-1.1	265	27.3	27.2	2.4	272	35.6	35.6	-1.1	266	24.1	24.1	1.5			
9	325	2.1	1.2	-1.7	329	1.2	0.6	-1.0	261	1.3	1.3	0.2	272	14.6	14.6	-0.5	285	31.5	30.4	-8.3	275	38.4	38.3	-3.2	280	35.4	34.9	-6.1			
10	307	2.6	2.1	-1.6	336	2.4	1.0	-2.2	262	1.4	1.4	0.2	275	14.5	14.5	-1.2	278	33.1	32.8	-4.5	273	49.8	49.7	-2.4	264	36.1	35.9	3.7			
11	317	2.3	1.6	-1.7	303	1.7	1.4	-0.9	246	2.2	2.0	0.9	267	13.6	13.6	0.6	268	29.8	29.8	1.0	274	40.6	40.5	-3.1	274	29.1	29.0	-1.8			
12	291	1.9	1.8	-0.7	324	2.9	1.7	-2.3	238	2.2	1.9	1.2	272	14.0	14.0	-0.4	278	33.7	33.4	-4.4	271	47.8	47.8	-0.8	266	25.3	25.2	1.9			
13	315	3.3	2.3	-2.3	303	2.4	2.0	-1.3	251	3.6	3.4	1.2	268	14.8	14.8	0.5	272	37.9	37.9	-1.2	261	45.4	44.9	6.8	269	20.0	20.0	0.4			
14	296	2.5	2.3	-1.1	291	1.7	1.6	-0.6	203	2.5	1.0	2.3	265	15.9	15.8	1.3	266	42.1	42.0	3.0	265	48.3	48.1	4.1	263	41.2	40.9	4.9			
15	280	1.7	1.7	-0.3	270	0.6	0.6	0.0	223	3.5	2.4	2.6	260	15.7	15.5	2.6	267	36.9	36.9	1.9	266	50.5	50.4	3.1	267	28.7	28.7	1.6			
16	320	3.3	2.1	-2.5	315	2.1	1.5	-1.5	272	2.5	2.5	-0.1	272	14.3	14.3	-0.6	279	40.3	39.8	-6.6	269	52.3	52.3	0.9	271	35.3	35.3	-0.7			
17	313	6.3	4.6	-4.3	313	3.7	2.7	-2.5	251	2.4	2.3	0.8	277	13.9	13.8	-1.7	271	36.7	36.7	-0.8	273	46.6	46.5	-2.4	270	32.2	32.2	0.0			
18	315	5.4	3.8	-3.8	320	3.3	2.1	-2.5	249	3.1	2.9	1.1	273	13.8	13.8	-0.7	269	32.0	32.0	0.3	268	44.4	44.4	1.3	283	25.2	24.6	-5.6			
19	292	3.7	3.4	-1.4	311	4.0	3.0	-2.6	292	2.7	2.5	-1.0	279	14.9	14.7	-2.2	273	36.7	36.7	-1.9	271	44.8	44.8	-0.5	273	33.4	33.4	-1.7			
20	272	2.9	2.9	-0.1	326	4.2	2.4	-3.5	275	3.6	3.6	-0.3	273	16.7	16.7	-0.9	275	38.5	38.4	-3.2	267	45.4	45.3	2.3	267	33.8	33.8	1.8			
21	307	2.6	2.1	-1.6	330	2.0	1.0	-1.7	266	3.0	3.0	0.2	276	15.3	15.2	-1.6	265	37.9	37.8	3.3	262	48.6	48.1	7.1	261	33.1	32.7	5.4			
22	303	4.2	3.5	-2.3	281	1.5	1.5	-0.3	270	2.3	2.3	0.0	270	14.7	14.7	0.0	266	38.5	38.4	2.5	265	45.8	45.6	4.1	272	21.3	21.3	-0.8			
23	309	5.8	4.5	-3.6	302	3.9	3.3	-2.1	276	2.8	2.8	-0.3	273	15.5	15.5	-0.8	282	35.5	34.7	-7.4	275	48.8	48.6	-3.9	257	31.2	30.5	6.8			
24	305	6.8	5.6	-3.9	313	5.4	3.9	-3.7	287	3.8	3.6	-1.1	272	14.9	14.9	-0.5	275	38.3	38.1	-3.6	272	48.0	48.0	-1.4	297	22.2	19.7	-10.2			
25	323	5.5	3.3	-4.4	300	3.0	2.6	-1.5	254	3.7	3.6	1.0	265	17.1	17.0	1.4	263	36.8	36.5	4.8	261	43.5	42.9	7.1	252	40.4	38.4	12.4			
26	327	6.9	3.8	-5.8	314	3.0	2.2	-2.1	246	3.7	3.4	1.5	265	16.4	16.3	1.4	265	38.7	38.5	3.5	261	51.7	51.1	7.9	265	37.4	37.2	3.4			
27	326	6.1	3.4	-5.1	298	2.1	1.9	-1.0	242	4.7	4.2	2.2	257	16.9	16.5	3.7	269	39.9	39.9	0.7	269	48.0	48.0	0.7	261	46.1	45.6	7.1			
28	311	3.2	2.4	-2.1	325	1.2	0.7	-1.0	246	3.9	3.6	1.6	267	15.6	15.6	0.9	267	33.4	33.4	1.7	269	46.6	46.6	0.5	266	26.8	26.7	2.0			
29	297	1.8	1.6	-0.8	279	1.9	1.9	-0.3	271	3.9	3.9	-0.1	276	13.7	13.6	-1.5	278	35.1	34.7	-5.1	281	40.9	40.1	-7.8	264	20.0	19.9	2.0			
30	302	2.8	2.4	-1.5	292	2.9	2.7	-1.1	254	3.3	3.2	0.9	272	12.9	12.9	-0.4	269	34.5	34.5	0.8	270	44.8	44.8	-0.1	270	33.1	33.1	0.2			
31	310	3.5	2.7	-2.3	301	2.1	1.8	-1.1	253	2.1	2.0	0.6	279	16.7	16.5	-2.7	275	38.2	38.0	-3.6	278	46.7	46.2	-6.9	297	26.0	23.2	-11.8			

Daily Normals of Upper Air Winds (1971-2000)

302

PATIALA

FEBRUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	313	4.0	2.9	-2.7	314	4.7	3.4	-3.3	280	2.3	2.3	-0.4	280	12.3	12.1	-2.2	281	30.7	30.1	-6.1	271	39.6	39.6	-1.0	260	33.8	33.3	6.0			
2	311	1.1	0.8	-0.7	307	2.5	2.0	-1.5	287	2.7	2.6	-0.8	280	13.9	13.7	-2.3	276	28.0	27.8	-2.9	275	45.1	45.0	-3.6	276	26.6	26.5	-2.8			
3	312	6.1	4.5	-4.1	311	4.0	3.0	-2.6	279	3.0	3.0	-0.5	281	12.1	11.9	-2.4	282	32.2	31.5	-6.5	278	46.8	46.4	-6.4	277	24.9	24.7	-3.0			
4	300	1.4	1.2	-0.7	298	3.2	2.8	-1.5	272	2.7	2.7	-0.1	277	15.7	15.6	-1.9	271	35.3	35.3	-0.5	266	41.1	41.0	2.7	268	25.4	25.4	0.8			
5	293	3.4	3.1	-1.3	305	2.8	2.3	-1.6	287	2.4	2.3	-0.7	279	12.1	12.0	-1.9	279	28.7	28.3	-4.7	265	35.0	34.9	3.2	270	32.5	32.5	0.1			
6	294	3.6	3.3	-1.5	295	1.4	1.3	-0.6	279	3.3	3.3	-0.5	270	13.8	13.8	0.0	273	24.0	24.0	-1.2	270	38.3	38.3	0.0	276	36.3	36.1	-3.8			
7	302	5.1	4.3	-2.7	309	3.2	2.5	-2.0	270	3.5	3.5	0.0	272	14.2	14.2	-0.5	269	28.5	28.5	0.4	268	35.5	35.5	1.1	274	19.6	19.6	-1.3			
8	24	1.7	-0.7	-1.6	298	1.9	1.7	-0.9	281	3.2	3.1	-0.6	278	12.6	12.5	-1.7	273	23.0	23.0	-1.4	280	35.5	35.0	-6.2	272	27.0	27.0	-1.0			
9	311	5.0	3.8	-3.3	315	4.4	3.1	-3.1	294	3.0	2.7	-1.2	288	14.1	13.4	-4.3	284	34.1	33.1	-8.1	286	39.1	37.6	-10.8	281	28.9	28.4	-5.3			
10	37	0.5	-0.3	-0.4	324	1.4	0.8	-1.1	265	3.3	3.3	0.3	269	10.8	10.8	0.2	270	31.7	31.7	0.1	269	36.3	36.3	0.7	278	32.0	31.7	-4.4			
11	333	2.2	1.0	-2.0	315	2.1	1.5	-1.5	296	5.1	4.6	-2.2	282	15.4	15.1	-3.2	278	36.0	35.7	-4.7	273	49.4	49.3	-3.0	259	29.0	28.4	5.7			
12	319	4.3	2.8	-3.2	324	5.2	3.0	-4.2	283	3.7	3.6	-0.8	264	14.5	14.4	1.6	268	34.6	34.6	1.3	272	40.9	40.9	-1.1	254	23.3	22.4	6.4			
13	314	3.6	2.6	-2.5	270	2.0	2.0	0.0	270	2.1	2.1	0.0	268	13.4	13.4	0.5	270	35.5	35.5	0.2	268	49.5	49.5	1.3	257	25.6	24.9	5.9			
14	311	4.4	3.3	-2.9	253	1.0	1.0	0.3	243	3.7	3.3	1.7	265	15.1	15.0	1.3	266	34.2	34.1	2.3	269	52.0	52.0	0.7	265	22.9	22.8	1.8			
15	305	2.9	2.4	-1.7	45	0.4	-0.3	-0.3	191	4.4	0.8	4.3	258	14.2	13.9	3.0	269	40.5	40.5	0.5	267	48.3	48.2	2.2	284	24.8	24.1	-5.9			
16	210	1.4	0.7	1.2	241	2.5	2.2	1.2	248	3.5	3.3	1.3	264	12.3	12.2	1.2	267	37.5	37.4	2.0	269	51.2	51.2	0.5	279	30.6	30.2	-4.7			
17	303	4.3	3.6	-2.3	287	2.8	2.7	-0.8	240	2.2	1.9	1.1	266	12.0	12.0	0.9	274	36.5	36.4	-2.7	269	57.7	57.7	0.8	276	21.7	21.6	-2.2			
18	279	2.6	2.6	-0.4	282	2.4	2.3	-0.5	241	4.3	3.8	2.1	277	13.2	13.1	-1.6	275	41.4	41.2	-3.9	268	52.9	52.9	1.4	287	14.4	13.8	-4.2			
19	299	5.5	4.8	-2.7	309	3.5	2.7	-2.2	278	3.7	3.7	-0.5	277	13.8	13.7	-1.7	276	36.4	36.2	-4.1	271	44.8	44.8	-0.9	272	29.2	29.2	-0.9			
20	302	7.1	6.0	-3.8	324	4.3	2.5	-3.5	269	3.9	3.9	0.1	271	15.3	15.3	-0.4	278	36.3	35.9	-5.3	268	45.0	45.0	1.5	271	34.8	34.8	-0.6			
21	311	5.3	4.0	-3.5	304	3.2	2.7	-1.8	270	4.8	4.8	0.0	277	14.5	14.4	-1.8	288	36.1	34.4	-10.9	278	47.7	47.2	-7.0	266	37.5	37.4	2.6			
22	308	4.8	3.8	-3.0	313	5.9	4.3	-4.0	297	5.3	4.7	-2.4	283	16.1	15.7	-3.5	283	36.5	35.5	-8.3	276	46.6	46.3	-5.0	260	38.1	37.5	6.9			
23	310	3.8	2.9	-2.4	316	3.7	2.6	-2.7	291	4.9	4.6	-1.8	280	16.5	16.2	-2.9	275	37.0	36.9	-3.1	274	44.2	44.1	-3.2	267	26.6	26.6	1.3			
24	333	1.8	0.8	-1.6	305	1.6	1.3	-0.9	286	5.1	4.9	-1.4	284	14.9	14.5	-3.6	281	36.9	36.2	-7.0	267	41.0	41.0	1.8	273	27.0	27.0	-1.6			
25	301	3.5	3.0	-1.8	296	4.1	3.7	-1.8	267	4.4	4.4	0.2	274	15.1	15.1	-1.0	274	33.6	33.5	-2.6	277	44.2	43.8	-5.7	273	21.8	21.8	-1.1			
26	312	2.8	2.1	-1.9	295	3.8	3.4	-1.6	277	3.9	3.9	-0.5	279	13.9	13.7	-2.1	265	31.7	31.6	2.9	265	36.6	36.5	2.9	268	26.9	26.9	1.0			
27	306	4.2	3.4	-2.5	306	2.6	2.1	-1.5	246	4.9	4.5	2.0	272	16.4	16.4	-0.5	275	37.5	37.4	-3.2	273	45.7	45.6	-2.7	272	37.1	37.1	-1.0			
28	309	6.2	4.8	-3.9	311	2.1	1.6	-1.4	278	5.2	5.2	-0.7	281	14.3	14.0	-2.7	276	33.4	33.2	-3.3	268	43.3	43.3	1.6	261	29.5	29.2	4.5			
29	338	3.8	1.4	-3.5	339	2.2	0.8	-2.1	266	4.6	4.6	0.3	257	16.1	15.7	3.5	270	38.0	38.0	-0.3	269	46.6	46.6	0.8	252	21.9	20.8	6.7			

Daily Normals of Upper Air Winds (1971-2000)

303

PATIALA

MARCH

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	311	3.3	2.5	-2.2	299	3.5	3.1	-1.7	248	3.1	2.9	1.2	271	10.6	10.6	-0.2	274	35.2	35.1	-2.6	269	48.4	48.4	0.8	276	35.4	35.2	-3.4			
2	307	6.8	5.4	-4.1	269	4.3	4.3	0.1	236	2.9	2.4	1.6	274	14.9	14.9	-1.0	275	36.4	36.2	-3.3	272	50.6	50.6	-1.4	255	12.2	11.8	3.1			
3	302	5.5	4.7	-2.9	313	5.0	3.7	-3.4	290	4.4	4.1	-1.5	276	14.4	14.3	-1.6	281	33.7	33.1	-6.3	266	48.1	48.0	3.7	267	27.2	27.2	1.5			
4	314	3.5	2.5	-2.4	302	3.1	2.6	-1.6	256	4.6	4.5	1.1	273	14.8	14.8	-0.7	263	34.3	34.1	4.0	261	44.8	44.3	7.0	265	28.0	27.9	2.6			
5	303	4.3	3.6	-2.3	292	3.2	3.0	-1.2	258	3.9	3.8	0.8	266	11.8	11.8	0.9	268	30.2	30.2	1.2	266	43.0	42.9	2.8	265	30.1	30.0	2.8			
6	295	7.3	6.6	-3.1	304	4.3	3.6	-2.4	271	4.8	4.8	-0.1	270	14.0	14.0	0.0	273	32.0	32.0	-1.6	268	46.8	46.8	1.3	269	31.4	31.4	0.4			
7	308	6.6	5.2	-4.0	302	3.6	3.0	-1.9	286	5.6	5.4	-1.5	272	16.2	16.2	-0.7	272	28.6	28.6	-1.0	269	36.9	36.9	0.6	271	23.9	23.9	-0.6			
8	301	7.2	6.2	-3.7	316	4.3	3.0	-3.1	294	7.4	6.8	-3.0	274	14.2	14.2	-0.9	274	30.8	30.7	-2.3	263	42.4	42.1	5.4	269	31.4	31.4	0.4			
9	305	8.0	6.6	-4.6	299	3.5	3.1	-1.7	284	4.5	4.4	-1.1	274	14.1	14.1	-1.0	276	30.2	30.0	-3.4	271	39.4	39.4	-0.6	267	28.0	28.0	1.3			
10	303	5.7	4.8	-3.1	274	3.0	3.0	-0.2	259	5.8	5.7	1.1	267	15.2	15.2	0.9	269	29.5	29.5	0.7	267	38.5	38.5	1.8	282	20.3	19.9	-4.1			
11	266	1.3	1.3	0.1	220	1.6	1.0	1.2	248	6.1	5.6	2.3	268	14.1	14.1	0.6	270	31.0	31.0	0.1	267	38.2	38.2	1.9	290	19.1	18.0	-6.5			
12	302	3.8	3.2	-2.0	300	5.3	4.6	-2.7	291	6.4	6.0	-2.3	282	15.0	14.7	-3.1	282	33.6	32.8	-7.2	277	50.1	49.8	-5.7	280	25.8	25.4	-4.4			
13	317	4.0	2.7	-2.9	323	4.0	2.4	-3.2	286	6.4	6.1	-1.8	278	15.5	15.3	-2.2	287	34.0	32.5	-10.1	280	43.9	43.2	-7.6	277	17.4	17.3	-2.1			
14	303	5.7	4.8	-3.1	317	4.7	3.2	-3.4	293	4.4	4.1	-1.7	271	16.0	16.0	-0.3	278	33.5	33.2	-4.8	282	42.6	41.7	-8.9	281	26.2	25.7	-5.1			
15	306	4.2	3.4	-2.5	317	4.1	2.8	-3.0	285	5.2	5.0	-1.3	275	16.8	16.7	-1.6	280	35.7	35.2	-6.0	277	47.4	47.0	-6.1	270	28.6	28.6	-0.2			
16	307	6.3	5.0	-3.8	299	2.3	2.0	-1.1	286	6.6	6.3	-1.8	276	15.9	15.8	-1.8	273	32.0	31.9	-1.9	273	45.0	45.0	-2.1	267	33.0	33.0	1.6			
17	294	3.9	3.6	-1.6	281	3.7	3.6	-0.7	251	5.6	5.3	1.8	270	13.3	13.3	0.1	268	34.4	34.4	1.1	266	42.8	42.7	3.1	278	30.6	30.3	-4.2			
18	301	4.3	3.7	-2.2	276	2.9	2.9	-0.3	276	6.1	6.1	-0.6	266	14.5	14.5	0.9	270	31.3	31.3	-0.2	275	44.8	44.7	-3.6	262	32.7	32.4	4.6			
19	309	7.0	5.4	-4.4	316	3.2	2.2	-2.3	262	3.5	3.5	0.5	276	14.5	14.4	-1.5	275	33.8	33.7	-2.7	272	47.7	47.7	-1.6	249	26.5	24.7	9.5			
20	315	3.8	2.7	-2.7	294	2.7	2.5	-1.1	271	4.5	4.5	-0.1	269	15.5	15.5	0.3	273	32.3	32.3	-1.7	274	46.7	46.6	-3.3	285	29.6	28.6	-7.6			
21	321	4.0	2.5	-3.1	286	2.6	2.5	-0.7	263	4.3	4.3	0.5	266	12.8	12.8	0.8	270	29.2	29.2	0.0	266	37.2	37.1	2.8	268	20.9	20.9	0.8			
22	315	4.7	3.3	-3.3	296	4.3	3.9	-1.9	271	6.5	6.5	-0.1	273	14.8	14.8	-0.9	275	33.6	33.5	-2.8	279	44.2	43.7	-6.7	257	25.8	25.2	5.7			
23	315	3.1	2.2	-2.2	307	4.8	3.8	-2.9	277	7.0	6.9	-0.9	272	14.4	14.4	-0.4	271	29.1	29.1	-0.3	271	42.6	42.6	-1.1	261	24.6	24.3	3.9			
24	300	2.4	2.1	-1.2	284	2.9	2.8	-0.7	270	5.4	5.4	0.0	276	12.2	12.1	-1.2	270	30.8	30.8	0.0	270	36.5	36.5	-0.3	280	23.0	22.7	-4.0			
25	321	5.3	3.3	-4.1	337	2.8	1.1	-2.6	245	4.5	4.1	1.9	275	12.3	12.3	-1.1	273	23.8	23.8	-1.2	268	34.0	34.0	1.1	287	26.8	25.7	-7.7			
26	316	6.0	4.2	-4.3	305	4.7	3.9	-2.7	302	4.1	3.5	-2.2	279	10.1	10.0	-1.6	281	29.7	29.1	-5.7	280	31.8	31.3	-5.7	259	10.1	9.9	1.9			
27	308	5.0	3.9	-3.1	306	5.2	4.2	-3.1	317	5.0	3.4	-3.6	287	13.7	13.1	-4.0	285	32.9	31.8	-8.5	291	38.3	35.8	-13.7	261	14.8	14.6	2.4			
28	346	0.8	0.2	-0.8	279	3.6	3.6	-0.6	270	6.4	6.4	0.0	276	12.6	12.5	-1.3	265	32.9	32.8	3.0	271	44.6	44.6	-0.4	273	22.7	22.7	-1.1			
29	284	3.3	3.2	-0.8	292	2.4	2.2	-0.9	269	5.2	5.2	0.1	268	11.4	11.4	0.3	273	30.3	30.3	-1.5	273	38.0	38.0	-1.8	265	29.9	29.8	2.6			
30	301	3.5	3.0	-1.8	296	3.7	3.3	-1.6	283	5.0	4.9	-1.1	274	11.5	11.5	-0.8	273	28.9	28.9	-1.7	268	40.4	40.4	1.7	261	30.3	29.9	4.8			
31	313	5.3	3.9	-3.6	304	5.0	4.1	-2.8	291	5.3	4.9	-1.9	284	15.7	15.2	-3.9	278	28.8	28.5	-4.0	273	40.6	40.5	-2.3	266	28.3	28.2	1.8			

Daily Normals of Upper Air Winds (1971-2000)

304

PATIALA

APRIL

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	320	3.1	2.0	-2.4	303	3.8	3.2	-2.1	293	4.4	4.1	-1.7	284	13.7	13.3	-3.4	280	36.3	35.8	-6.1	270	45.5	45.5	-0.2	264	32.0	31.8	3.1			
2	305	5.5	4.5	-3.2	307	3.9	3.1	-2.3	285	4.6	4.4	-1.2	274	13.4	13.4	-1.0	270	28.2	28.2	0.1	272	34.6	34.6	-1.2	265	38.5	38.3	3.4			
3	327	4.4	2.4	-3.7	281	3.1	3.0	-0.6	267	5.2	5.2	0.3	260	11.3	11.1	1.9	264	26.2	26.1	2.7	260	37.0	36.4	6.4	269	27.5	27.5	0.3			
4	320	2.5	1.6	-1.9	290	2.7	2.5	-0.9	259	3.7	3.6	0.7	276	11.9	11.8	-1.3	274	27.8	27.7	-2.0	272	34.1	34.1	-1.2	269	22.2	22.2	0.2			
5	321	2.7	1.7	-2.1	289	3.7	3.5	-1.2	284	4.0	3.9	-1.0	288	10.8	10.2	-3.4	277	24.8	24.6	-2.9	274	34.3	34.2	-2.6	279	18.6	18.4	-2.9			
6	304	5.0	4.1	-2.8	305	5.8	4.8	-3.3	310	6.5	5.0	-4.2	279	13.6	13.4	-2.2	283	30.7	29.9	-6.9	269	36.6	36.6	0.7	271	24.4	24.4	-0.4			
7	320	6.9	4.4	-5.3	320	7.5	4.8	-5.7	295	6.9	6.3	-2.9	281	12.4	12.2	-2.4	278	26.5	26.2	-3.7	275	33.6	33.5	-2.8	275	26.3	26.2	-2.2			
8	307	3.8	3.0	-2.3	305	4.2	3.4	-2.4	291	6.2	5.8	-2.2	282	12.9	12.6	-2.7	273	29.1	29.1	-1.6	269	34.7	34.7	0.5	270	26.9	26.9	0.1			
9	249	1.4	1.3	0.5	308	3.7	2.9	-2.3	298	5.3	4.7	-2.5	274	11.6	11.6	-0.9	272	27.1	27.1	-0.9	262	34.0	33.7	4.7	279	20.4	20.1	-3.2			
10	302	5.4	4.6	-2.9	305	6.7	5.5	-3.8	298	6.9	6.1	-3.3	289	11.6	11.0	-3.7	282	25.6	25.1	-5.2	283	25.9	25.3	-5.7	273	18.0	18.0	-1.1			
11	288	2.5	2.4	-0.8	310	5.2	4.0	-3.3	300	6.1	5.3	-3.1	288	10.4	9.9	-3.2	277	24.3	24.1	-2.9	278	34.9	34.6	-4.9	288	23.6	22.5	-7.1			
12	313	5.1	3.7	-3.5	302	6.0	5.1	-3.2	292	6.8	6.3	-2.5	272	12.0	12.0	-0.4	269	27.4	27.4	0.6	266	34.9	34.8	2.6	274	18.7	18.6	-1.4			
13	305	3.2	2.6	-1.8	304	4.6	3.8	-2.6	298	6.7	5.9	-3.1	286	10.6	10.2	-3.0	278	24.3	24.1	-3.3	273	36.7	36.7	-1.7	290	15.0	14.1	-5.2			
14	304	3.4	2.8	-1.9	292	5.1	4.7	-1.9	292	5.2	4.8	-1.9	272	7.8	7.8	-0.3	268	19.9	19.9	0.6	271	28.2	28.2	-0.5	270	12.9	12.9	0.0			
15	316	4.3	3.0	-3.1	307	3.9	3.1	-2.3	283	5.2	5.1	-1.2	280	9.6	9.5	-1.6	277	19.8	19.7	-2.3	280	24.4	24.0	-4.3	290	15.2	14.3	-5.2			
16	309	6.5	5.1	-4.1	302	4.6	3.9	-2.4	285	5.6	5.4	-1.4	291	9.5	8.9	-3.4	294	19.5	17.8	-7.9	283	27.1	26.5	-5.9	284	15.4	15.0	-3.7			
17	313	5.2	3.8	-3.6	307	6.1	4.9	-3.7	312	7.6	5.6	-5.1	301	12.6	10.8	-6.5	288	22.6	21.5	-7.0	286	29.1	28.0	-7.8	280	16.6	16.3	-2.9			
18	311	6.8	5.1	-4.5	316	5.4	3.8	-3.9	297	6.3	5.6	-2.9	293	10.9	10.1	-4.2	276	24.3	24.1	-2.7	279	30.0	29.6	-4.7	276	17.6	17.5	-1.7			
19	310	6.2	4.8	-4.0	305	5.7	4.7	-3.3	286	5.9	5.7	-1.6	285	9.1	8.8	-2.4	275	20.7	20.6	-1.7	276	25.4	25.3	-2.6	262	13.0	12.9	1.7			
20	315	5.5	3.9	-3.9	307	5.9	4.7	-3.6	302	6.2	5.2	-3.3	286	10.6	10.2	-3.0	286	19.4	18.6	-5.5	274	27.8	27.7	-2.0	253	14.8	14.1	4.4			
21	317	3.8	2.6	-2.8	308	5.8	4.6	-3.6	293	5.9	5.4	-2.3	280	10.8	10.6	-1.8	266	19.2	19.1	1.4	261	28.4	28.1	4.2	264	22.6	22.5	2.3			
22	319	8.0	5.3	-6.0	303	4.8	4.0	-2.6	308	5.4	4.3	-3.3	285	9.5	9.2	-2.5	281	16.2	15.9	-3.1	272	25.7	25.7	-1.0	272	16.1	16.1	-0.5			
23	311	6.4	4.8	-4.2	298	5.2	4.6	-2.4	302	7.1	6.0	-3.8	298	9.1	8.0	-4.3	279	15.6	15.4	-2.5	276	22.3	22.2	-2.4	284	16.3	15.8	-3.8			
24	310	8.5	6.5	-5.5	308	5.5	4.3	-3.4	302	6.8	5.8	-3.6	291	9.0	8.4	-3.3	284	15.6	15.2	-3.7	280	26.1	25.7	-4.7	274	14.9	14.9	-1.1			
25	310	3.9	3.0	-2.5	297	5.6	5.0	-2.5	299	7.3	6.4	-3.5	299	10.1	8.8	-4.9	287	18.1	17.3	-5.4	281	26.6	26.1	-5.3	270	15.1	15.1	0.0			
26	302	2.5	2.1	-1.3	313	1.9	1.4	-1.3	300	3.8	3.3	-1.9	292	10.5	9.7	-4.0	280	21.0	20.7	-3.8	276	26.0	25.8	-2.9	262	16.3	16.1	2.3			
27	308	2.8	2.2	-1.7	316	3.3	2.3	-2.4	301	7.4	6.3	-3.8	288	10.8	10.3	-3.3	282	19.2	18.8	-4.1	275	26.3	26.2	-2.2	279	24.2	23.9	-3.7			
28	305	5.4	4.4	-3.1	303	5.0	4.2	-2.7	303	6.4	5.4	-3.5	291	9.1	8.5	-3.2	284	18.8	18.2	-4.6	282	25.8	25.3	-5.2	272	12.5	12.5	-0.5			
29	336	3.5	1.4	-3.2	305	3.7	3.0	-2.1	282	7.1	6.9	-1.5	285	10.1	9.8	-2.6	285	22.1	21.4	-5.6	271	23.0	23.0	-0.3	262	17.1	16.9	2.5			
30	324	2.7	1.6	-2.2	304	4.3	3.6	-2.4	294	6.6	6.0	-2.7	297	10.3	9.2	-4.7	288	20.0	19.0	-6.2	280	28.6	28.2	-4.8	270	11.6	11.6	-0.1			

Daily Normals of Upper Air Winds (1971-2000)

305

PATIALA

MAY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	319	3.8	2.5	-2.9	279	1.8	1.8	-0.3	265	6.1	6.1	0.5	265	8.6	8.6	0.8	273	14.8	14.8	-0.7	268	24.3	24.3	0.9	256	13.0	12.6	3.1			
2	306	5.2	4.2	-3.0	278	3.7	3.7	-0.5	276	4.5	4.5	-0.5	273	10.0	10.0	-0.5	271	19.9	19.9	-0.4	271	24.2	24.2	-0.5	262	18.3	18.1	2.7			
3	252	2.0	1.9	0.6	274	3.2	3.2	-0.2	280	4.8	4.7	-0.8	277	7.9	7.8	-1.0	266	15.0	15.0	1.0	265	27.0	26.9	2.3	265	14.5	14.4	1.3			
4	316	3.3	2.3	-2.4	293	2.5	2.3	-1.0	280	5.2	5.1	-0.9	284	7.5	7.3	-1.8	277	12.4	12.3	-1.5	268	25.6	25.6	1.0	257	17.7	17.2	4.1			
5	320	4.7	3.0	-3.6	313	4.5	3.3	-3.1	300	5.6	4.8	-2.8	296	8.5	7.6	-3.7	281	13.8	13.6	-2.6	269	24.7	24.7	0.5	269	18.2	18.2	0.2			
6	325	4.7	2.7	-3.8	317	4.0	2.7	-2.9	300	4.8	4.1	-2.4	293	10.4	9.6	-4.0	281	14.4	14.1	-2.7	275	25.3	25.2	-2.2	261	11.1	11.0	1.7			
7	300	5.4	4.7	-2.7	303	3.0	2.5	-1.6	315	4.7	3.3	-3.3	291	7.8	7.3	-2.8	278	14.1	14.0	-2.0	279	23.7	23.4	-3.5	270	18.8	18.8	0.1			
8	270	2.5	2.5	0.0	281	2.0	2.0	-0.4	294	3.9	3.6	-1.6	283	8.7	8.5	-2.0	281	14.8	14.5	-2.8	282	20.1	19.6	-4.3	271	17.2	17.2	-0.4			
9	288	0.9	0.9	-0.3	279	3.7	3.7	-0.6	305	6.6	5.4	-3.8	291	9.3	8.7	-3.3	291	15.8	14.7	-5.7	281	22.8	22.4	-4.3	282	9.5	9.3	-1.9			
10	180	1.0	0.0	1.0	300	2.4	2.1	-1.2	292	8.1	7.5	-3.1	288	11.3	10.7	-3.5	278	18.7	18.5	-2.5	273	24.0	24.0	-1.1	277	8.6	8.5	-1.0			
11	36	2.2	-1.3	-1.8	313	1.6	1.2	-1.1	285	6.2	6.0	-1.6	287	14.2	13.6	-4.2	287	25.2	24.1	-7.3	280	25.5	25.1	-4.3	265	13.4	13.4	1.1			
12	332	2.4	1.1	-2.1	302	2.8	2.4	-1.5	296	5.5	5.0	-2.4	283	14.6	14.2	-3.2	283	21.6	21.0	-5.0	280	31.4	30.9	-5.5	274	19.2	19.1	-1.4			
13	303	4.8	4.0	-2.6	295	3.3	3.0	-1.4	301	6.1	5.2	-3.1	281	10.3	10.1	-1.9	274	21.2	21.1	-1.5	271	27.1	27.1	-0.6	253	10.8	10.3	3.2			
14	310	7.9	6.0	-5.1	312	6.1	4.5	-4.1	292	6.4	5.9	-2.4	297	11.4	10.1	-5.2	276	20.3	20.2	-2.2	266	25.4	25.3	1.6	268	13.1	13.1	0.5			
15	271	4.7	4.7	-0.1	301	5.1	4.4	-2.6	300	6.0	5.2	-3.0	287	8.7	8.3	-2.5	273	16.5	16.5	-0.8	278	25.6	25.4	-3.5	296	9.0	8.1	-3.9			
16	285	1.6	1.5	-0.4	296	4.8	4.3	-2.1	306	7.9	6.4	-4.6	302	8.9	7.6	-4.7	276	17.2	17.1	-1.8	275	23.9	23.8	-2.1	265	16.4	16.3	1.3			
17	319	3.7	2.4	-2.8	312	5.5	4.1	-3.7	298	9.0	8.0	-4.2	307	11.3	9.0	-6.8	281	22.4	22.0	-4.3	274	24.5	24.4	-1.8	257	20.6	20.1	4.5			
18	250	3.3	3.1	1.1	285	3.1	3.0	-0.8	295	6.5	5.9	-2.7	297	11.5	10.2	-5.3	292	20.0	18.6	-7.4	278	24.4	24.2	-3.3	267	13.6	13.6	0.8			
19	309	4.0	3.1	-2.5	294	4.4	4.0	-1.8	297	7.2	6.4	-3.2	297	12.7	11.3	-5.7	283	22.9	22.3	-5.1	278	26.6	26.4	-3.5	279	12.0	11.9	-1.8			
20	305	4.7	3.9	-2.7	306	4.1	3.3	-2.4	286	5.8	5.6	-1.6	301	9.8	8.4	-5.1	287	16.8	16.1	-4.8	276	21.9	21.8	-2.4	264	8.9	8.8	1.0			
21	313	4.1	3.0	-2.8	304	3.6	3.0	-2.0	306	8.1	6.5	-4.8	301	11.0	9.5	-5.6	288	18.9	18.0	-5.7	270	24.0	24.0	-0.2	261	13.0	12.8	2.1			
22	339	6.9	2.5	-6.4	299	6.0	5.3	-2.9	304	7.6	6.3	-4.3	306	10.5	8.5	-6.2	292	21.0	19.4	-8.0	284	21.0	20.4	-5.0	281	12.3	12.1	-2.3			
23	314	2.9	2.1	-2.0	297	3.6	3.2	-1.6	298	6.9	6.1	-3.3	307	11.1	8.9	-6.6	289	19.7	18.7	-6.3	280	16.2	16.0	-2.7	262	8.2	8.1	1.2			
24	308	5.0	3.9	-3.1	301	4.5	3.9	-2.3	304	6.8	5.6	-3.8	298	11.4	10.0	-5.4	289	18.6	17.6	-6.0	279	22.7	22.4	-3.4	242	10.6	9.4	4.9			
25	284	2.5	2.4	-0.6	284	4.0	3.9	-1.0	305	6.8	5.6	-3.9	301	11.2	9.6	-5.8	293	23.7	21.8	-9.3	283	27.6	26.9	-6.0	235	7.6	6.2	4.4			
26	307	4.0	3.2	-2.4	300	4.0	3.5	-2.0	298	6.7	5.9	-3.1	296	12.0	10.8	-5.2	284	23.1	22.4	-5.6	265	25.2	25.1	2.1	272	8.9	8.9	-0.3			
27	307	4.8	3.8	-2.9	302	4.9	4.2	-2.6	301	7.6	6.5	-3.9	294	10.9	10.0	-4.4	287	21.1	20.2	-6.2	283	25.0	24.3	-5.8	260	10.8	10.6	1.9			
28	302	4.9	4.2	-2.6	300	5.1	4.4	-2.5	299	8.5	7.4	-4.1	293	10.0	9.2	-4.0	280	21.9	21.6	-3.9	274	25.9	25.9	-1.6	265	12.6	12.5	1.2			
29	278	3.6	3.6	-0.5	281	4.9	4.8	-0.9	292	6.1	5.7	-2.3	292	9.9	9.2	-3.7	287	21.3	20.3	-6.3	272	22.9	22.9	-0.6	247	8.8	8.1	3.4			
30	301	3.9	3.3	-2.0	282	4.4	4.3	-0.9	290	4.9	4.6	-1.7	296	10.5	9.4	-4.6	271	19.9	19.9	-0.4	269	22.3	22.3	0.4	240	8.6	7.5	4.3			
31	317	3.8	2.6	-2.8	300	4.6	4.0	-2.3	301	6.0	5.1	-3.1	282	8.5	8.3	-1.7	269	17.8	17.8	0.2	268	22.6	22.6	0.9	261	14.5	14.3	2.2			

Daily Normals of Upper Air Winds (1971-2000)

306

PATIALA

JUNE

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	311	7.2	5.5	-4.7	310	6.1	4.7	-3.9	305	7.5	6.1	-4.3	302	9.6	8.1	-5.1	284	19.0	18.4	-4.6	273	21.0	21.0	-1.2	250	11.3	10.6	3.9			
2	309	7.0	5.5	-4.4	309	6.7	5.2	-4.2	313	8.6	6.3	-5.8	303	8.7	7.3	-4.8	283	20.1	19.6	-4.4	267	22.5	22.5	1.0	256	11.5	11.2	2.8			
3	294	4.7	4.3	-1.9	296	5.3	4.8	-2.3	307	7.8	6.2	-4.7	298	9.5	8.4	-4.4	270	19.7	19.7	0.0	268	25.5	25.5	1.1	261	12.6	12.5	1.9			
4	303	3.1	2.6	-1.7	304	4.1	3.4	-2.3	294	6.8	6.2	-2.8	302	10.9	9.3	-5.7	283	17.5	17.0	-4.0	278	23.4	23.2	-3.3	275	6.8	6.8	-0.6			
5	300	5.9	5.1	-2.9	299	5.3	4.6	-2.6	305	6.2	5.1	-3.6	302	9.7	8.2	-5.2	284	17.1	16.6	-4.1	276	24.1	24.0	-2.6	290	7.4	7.0	-2.5			
6	286	5.6	5.4	-1.5	296	5.0	4.5	-2.2	316	6.4	4.5	-4.6	309	8.5	6.6	-5.3	290	13.6	12.8	-4.6	266	19.5	19.4	1.5	255	8.6	8.3	2.2			
7	310	4.5	3.5	-2.9	301	5.7	4.9	-3.0	312	8.4	6.2	-5.6	316	8.5	5.9	-6.1	292	15.7	14.5	-6.0	276	16.7	16.6	-1.8	274	7.8	7.8	-0.5			
8	315	1.8	1.3	-1.3	298	4.1	3.6	-1.9	301	8.7	7.4	-4.5	308	9.5	7.5	-5.9	279	15.8	15.6	-2.6	287	15.4	14.7	-4.6	281	7.7	7.6	-1.5			
9	296	3.2	2.9	-1.4	291	4.5	4.2	-1.6	294	6.9	6.3	-2.8	304	9.0	7.5	-5.0	268	16.0	16.0	0.6	263	17.1	17.0	2.0	270	12.8	12.8	0.0			
10	300	5.8	5.0	-2.9	280	3.5	3.4	-0.6	311	6.3	4.8	-4.1	295	8.2	7.4	-3.5	282	16.9	16.6	-3.4	267	16.4	16.4	0.9	273	8.2	8.2	-0.4			
11	297	3.1	2.8	-1.4	287	3.1	3.0	-0.9	307	8.6	6.9	-5.2	303	11.3	9.5	-6.1	274	17.3	17.3	-1.3	261	16.7	16.5	2.7	263	7.7	7.6	0.9			
12	320	4.2	2.7	-3.2	295	2.9	2.6	-1.2	306	7.4	6.0	-4.3	300	8.0	6.9	-4.0	272	16.7	16.7	-0.6	269	17.2	17.2	0.3	267	7.0	7.0	0.4			
13	314	3.3	2.4	-2.3	309	3.6	2.8	-2.3	308	7.1	5.6	-4.4	296	7.2	6.5	-3.2	270	17.8	17.8	-0.1	269	18.9	18.9	0.3	259	6.5	6.4	1.3			
14	302	5.2	4.4	-2.8	301	4.1	3.5	-2.1	311	6.5	4.9	-4.3	299	9.2	8.0	-4.5	265	17.7	17.6	1.4	261	17.2	17.0	2.7	264	4.7	4.7	0.5			
15	291	4.9	4.6	-1.8	297	4.5	4.0	-2.0	309	7.3	5.7	-4.6	299	8.3	7.3	-4.0	270	18.4	18.4	-0.1	258	19.3	18.9	4.0	214	2.5	1.4	2.1			
16	303	2.0	1.7	-1.1	319	3.2	2.1	-2.4	325	5.5	3.2	-4.5	311	8.6	6.5	-5.6	280	16.9	16.6	-2.9	265	13.6	13.6	1.1	150	2.2	-1.1	1.9			
17	287	3.4	3.3	-1.0	299	3.7	3.2	-1.8	304	5.8	4.8	-3.2	300	7.8	6.7	-3.9	272	12.8	12.8	-0.4	268	13.8	13.8	0.5	231	5.8	4.5	3.6			
18	306	2.2	1.8	-1.3	294	1.7	1.6	-0.7	322	6.8	4.2	-5.3	296	8.0	7.2	-3.5	273	15.4	15.4	-0.7	269	10.3	10.3	0.1	266	4.5	4.5	0.3			
19	32	0.9	-0.5	-0.8	230	0.8	0.6	0.5	307	6.2	5.0	-3.7	310	6.2	4.8	-4.0	275	13.8	13.7	-1.3	259	11.9	11.7	2.3	214	2.3	1.3	1.9			
20	216	0.9	0.5	0.7	225	1.3	0.9	0.9	309	4.5	3.5	-2.8	294	4.2	3.8	-1.7	274	8.9	8.9	-0.6	267	10.1	10.1	0.5	231	4.8	3.7	3.0			
21	318	1.3	0.9	-1.0	297	1.3	1.2	-0.6	285	2.8	2.7	-0.7	277	5.0	5.0	-0.6	262	12.3	12.2	1.8	257	10.4	10.1	2.4	263	2.3	2.3	0.3			
22	279	1.3	1.3	-0.2	309	1.9	1.5	-1.2	318	6.2	4.2	-4.6	305	3.7	3.0	-2.1	263	12.2	12.1	1.4	250	12.1	11.4	4.2	268	5.1	5.1	0.2			
23	305	3.8	3.1	-2.2	314	3.7	2.7	-2.6	319	6.3	4.1	-4.8	309	5.7	4.4	-3.6	268	11.8	11.8	0.4	256	12.3	12.0	2.9	234	2.2	1.8	1.3			
24	313	1.8	1.3	-1.2	280	2.3	2.3	-0.4	322	7.0	4.3	-5.5	311	6.6	5.0	-4.3	271	11.5	11.5	-0.3	258	11.9	11.7	2.4	257	2.8	2.7	0.6			
25	275	2.3	2.3	-0.2	278	2.2	2.2	-0.3	324	6.1	3.6	-4.9	321	6.3	4.0	-4.9	278	11.2	11.1	-1.5	256	10.6	10.3	2.5	18	2.5	-0.8	-2.4			
26	256	1.2	1.2	0.3	279	2.0	2.0	-0.3	315	5.9	4.2	-4.2	295	6.3	5.7	-2.6	273	11.0	11.0	-0.5	248	12.2	11.3	4.6	235	3.7	3.0	2.1			
27	191	1.6	0.3	1.6	276	2.8	2.8	-0.3	313	6.4	4.7	-4.4	304	5.0	4.1	-2.8	279	6.1	6.0	-0.9	274	4.3	4.3	-0.3	95	3.5	-3.5	0.3			
28	355	1.2	0.1	-1.2	270	1.7	1.7	0.0	317	5.7	3.9	-4.2	304	6.4	5.3	-3.6	289	9.5	9.0	-3.1	267	5.6	5.6	0.3	62	5.1	-4.5	-2.4			
29	141	2.8	-1.8	2.2	295	1.7	1.5	-0.7	318	6.3	4.2	-4.7	313	6.6	4.8	-4.5	296	7.1	6.4	-3.1	290	7.9	7.4	-2.7	5	3.5	-0.3	-3.5			
30	207	0.9	0.4	0.8	261	2.6	2.6	0.4	313	4.2	3.1	-2.9	304	5.0	4.2	-2.8	277	8.8	8.7	-1.1	250	5.4	5.1	1.9	78	4.8	-4.7	-1.0			

Daily Normals of Upper Air Winds (1971-2000)

PATIALA

JULY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	83	1.7	-1.7	-0.2	302	1.3	1.1	-0.7	301	4.2	3.6	-2.2	293	6.9	6.3	-2.7	268	10.4	10.4	0.4	277	4.3	4.3	-0.5	54	4.1	-3.3	-2.4
2	283	2.6	2.5	-0.6	257	1.7	1.7	0.4	316	3.3	2.3	-2.4	291	3.3	3.1	-1.2	281	10.2	10.0	-2.0	269	6.1	6.1	0.1	27	1.8	-0.8	-1.6
3	248	1.6	1.5	0.6	285	2.4	2.3	-0.6	313	3.4	2.5	-2.3	282	3.9	3.8	-0.8	273	7.7	7.7	-0.4	261	10.0	9.9	1.6	67	0.8	-0.7	-0.3
4	270	1.9	1.9	0.0	281	2.6	2.6	-0.5	318	4.3	2.9	-3.2	295	4.7	4.3	-2.0	276	9.6	9.5	-1.0	265	6.4	6.4	0.6	62	3.4	-3.0	-1.6
5	294	3.6	3.3	-1.5	281	3.2	3.1	-0.6	315	4.7	3.3	-3.3	310	5.7	4.4	-3.7	277	9.9	9.8	-1.2	268	8.3	8.3	0.3	39	2.7	-1.7	-2.1
6	318	4.6	3.1	-3.4	297	4.9	4.4	-2.2	317	6.4	4.4	-4.7	299	4.7	4.1	-2.3	252	6.9	6.6	2.1	241	6.0	5.2	2.9	29	3.3	-1.6	-2.9
7	360	0.1	0.0	-0.1	298	2.7	2.4	-1.3	311	5.6	4.2	-3.7	326	5.0	2.8	-4.2	268	7.2	7.2	0.2	240	4.6	4.0	2.3	72	5.8	-5.5	-1.8
8	103	1.8	-1.8	0.4	308	1.6	1.3	-1.0	312	3.1	2.3	-2.1	347	3.6	0.8	-3.5	284	4.1	4.0	-1.0	226	3.7	2.7	2.6	72	3.6	-3.4	-1.1
9	360	1.2	0.0	-1.2	252	1.3	1.2	0.4	299	3.1	2.7	-1.5	292	3.7	3.4	-1.4	243	3.7	3.3	1.7	274	3.2	3.2	-0.2	81	0.6	-0.6	-0.1
10	347	0.9	0.2	-0.9	285	2.3	2.2	-0.6	307	4.0	3.2	-2.4	333	1.1	0.5	-1.0	261	5.4	5.3	0.8	233	4.3	3.4	2.6	134	6.2	-4.5	4.3
11	231	0.6	0.5	0.4	261	1.8	1.8	0.3	318	2.7	1.8	-2.0	288	2.3	2.2	-0.7	230	4.5	3.5	2.9	256	4.0	3.9	1.0	64	5.2	-4.7	-2.3
12	90	0.2	-0.2	0.0	135	0.7	-0.5	0.5	270	1.2	1.2	0.0	278	3.5	3.5	-0.5	242	5.1	4.5	2.4	241	6.5	5.7	3.1	191	3.3	0.6	3.2
13	298	1.7	1.5	-0.8	180	0.3	0.0	0.3	315	0.8	0.6	-0.6	249	2.5	2.3	0.9	239	5.2	4.5	2.7	234	5.3	4.3	3.1	102	6.6	-6.5	1.4
14	45	0.1	-0.1	-0.1	135	0.8	-0.6	0.6	345	1.6	0.4	-1.5	14	0.4	-0.1	-0.4	230	3.0	2.3	1.9	231	1.3	1.0	0.8	78	10.7	-10.5	-2.3
15	150	0.8	-0.4	0.7	157	1.3	-0.5	1.2	14	0.4	-0.1	-0.4	246	1.2	1.1	0.5	236	5.9	4.9	3.3	232	6.8	5.3	4.2	85	6.0	-6.0	-0.5
16	144	1.7	-1.0	1.4	117	0.4	-0.4	0.2	27	0.4	-0.2	-0.4	289	1.8	1.7	-0.6	258	5.1	5.0	1.1	239	5.6	4.8	2.9	89	6.3	-6.3	-0.1
17	166	0.4	-0.1	0.4	207	0.2	0.1	0.2	310	2.3	1.8	-1.5	325	1.9	1.1	-1.6	253	3.4	3.3	1.0	209	4.3	2.1	3.8	111	8.1	-7.6	2.9
18	131	2.9	-2.2	1.9	157	2.1	-0.8	1.9	336	1.2	0.5	-1.1	290	2.3	2.2	-0.8	258	3.9	3.8	0.8	258	1.9	1.9	0.4	106	7.1	-6.8	2.0
19	143	2.1	-1.3	1.7	214	0.4	0.2	0.3	349	2.1	0.4	-2.1	337	2.8	1.1	-2.6	252	2.9	2.8	0.9	238	3.6	3.0	1.9	107	8.1	-7.7	2.4
20	161	2.4	-0.8	2.3	198	0.6	0.2	0.6	338	3.2	1.2	-3.0	328	1.5	0.8	-1.3	231	5.3	4.1	3.3	217	6.4	3.8	5.1	111	10.2	-9.5	3.6
21	122	4.0	-3.4	2.1	139	1.8	-1.2	1.4	125	1.2	-1.0	0.7	166	1.6	-0.4	1.6	242	5.5	4.9	2.6	225	4.2	3.0	3.0	101	5.8	-5.7	1.1
22	140	3.9	-2.5	3.0	144	2.6	-1.5	2.1	128	1.6	-1.3	1.0	315	1.0	0.7	-0.7	256	3.7	3.6	0.9	235	3.3	2.7	1.9	112	8.1	-7.5	3.0
23	191	3.2	0.6	3.1	167	2.2	-0.5	2.1	180	0.8	0.0	0.8	157	2.3	-0.9	2.1	240	3.6	3.1	1.8	210	3.6	1.8	3.1	93	5.9	-5.9	0.3
24	189	2.4	0.4	2.4	165	2.7	-0.7	2.6	97	0.8	-0.8	0.1	202	1.6	0.6	1.5	247	5.2	4.8	2.0	222	6.4	4.3	4.8	80	2.9	-2.9	-0.5
25	315	0.3	0.2	-0.2	121	1.2	-1.0	0.6	29	1.3	-0.6	-1.1	319	2.0	1.3	-1.5	251	4.2	4.0	1.4	218	4.8	3.0	3.8	97	4.3	-4.3	0.5
26	229	0.9	0.7	0.6	256	0.4	0.4	0.1	321	1.3	0.8	-1.0	298	1.9	1.7	-0.9	233	3.5	2.8	2.1	224	2.8	1.9	2.0	95	7.4	-7.4	0.7
27	162	2.8	-0.9	2.7	253	1.4	1.3	0.4	327	2.0	1.1	-1.7	317	1.8	1.2	-1.3	290	1.2	1.1	-0.4	160	2.0	-0.7	1.9	102	10.7	-10.5	2.2
28	119	1.3	-1.1	0.6	67	0.8	-0.7	-0.3	346	2.9	0.7	-2.8	34	0.4	-0.2	-0.3	163	2.1	-0.6	2.0	108	4.3	-4.1	1.3	101	9.4	-9.2	1.8
29	68	1.6	-1.5	-0.6	141	1.4	-0.9	1.1	349	1.0	0.2	-1.0	135	0.3	-0.2	0.2	173	1.6	-0.2	1.6	145	4.0	-2.3	3.3	103	11.1	-10.8	2.4
30	111	1.4	-1.3	0.5	211	0.6	0.3	0.5	309	2.2	1.7	-1.4	248	1.6	1.5	0.6	211	1.2	0.6	1.0	182	2.9	0.1	2.9	86	8.0	-8.0	-0.6
31	143	2.1	-1.3	1.7	208	1.5	0.7	1.3	301	1.7	1.5	-0.9	287	2.8	2.7	-0.8	264	4.0	4.0	0.4	217	3.4	2.0	2.7	88	9.8	-9.8	-0.3

Daily Normals of Upper Air Winds (1971-2000)

308

PATIALA

AUGUST

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	14	0.4	-0.1	-0.4	217	1.0	0.6	0.8	284	2.1	2.0	-0.5	328	0.9	0.5	-0.8	295	4.4	4.0	-1.9	280	2.8	2.8	-0.5	102	6.4	-6.3	1.3			
2	150	1.6	-0.8	1.4	135	1.1	-0.8	0.8	7	0.8	-0.1	-0.8	248	1.1	1.0	0.4	270	2.0	2.0	0.0	287	4.4	4.2	-1.3	59	5.4	-4.6	-2.8			
3	90	1.2	-1.2	0.0	126	0.9	-0.7	0.5	236	0.4	0.3	0.2	229	1.8	1.4	1.2	256	3.0	2.9	0.7	263	2.4	2.4	0.3	96	7.1	-7.1	0.7			
4	295	1.7	1.5	-0.7	279	1.2	1.2	-0.2	342	1.3	0.4	-1.2	256	0.8	0.8	0.2	248	2.9	2.7	1.1	259	4.2	4.1	0.8	82	4.4	-4.4	-0.6			
5	275	1.2	1.2	-0.1	8	0.7	-0.1	-0.7	320	1.7	1.1	-1.3	243	1.1	1.0	0.5	234	2.9	2.3	1.7	185	3.5	0.3	3.5	107	7.0	-6.7	2.1			
6	319	2.3	1.5	-1.7	264	1.8	1.8	0.2	333	0.7	0.3	-0.6	218	2.3	1.4	1.8	228	1.3	1.0	0.9	215	2.4	1.4	2.0	88	7.3	-7.3	-0.3			
7	281	2.1	2.1	-0.4	233	1.0	0.8	0.6	18	1.9	-0.6	-1.8	135	0.1	-0.1	0.1	256	2.9	2.8	0.7	164	2.2	-0.6	2.1	98	10.1	-10.0	1.4			
8	207	0.9	0.4	0.8	264	1.8	1.8	0.2	324	0.9	0.5	-0.7	312	1.5	1.1	-1.0	248	4.0	3.7	1.5	224	5.0	3.5	3.6	88	6.4	-6.4	-0.2			
9	96	2.0	-2.0	0.2	315	0.1	0.1	-0.1	312	1.3	1.0	-0.9	270	1.0	1.0	0.0	253	3.4	3.2	1.0	232	4.2	3.3	2.6	96	5.4	-5.4	0.6			
10	137	2.1	-1.4	1.5	121	0.6	-0.5	0.3	302	1.3	1.1	-0.7	297	2.7	2.4	-1.2	245	3.3	3.0	1.4	253	3.0	2.9	0.9	89	8.0	-8.0	-0.1			
11	275	1.1	1.1	-0.1	293	1.3	1.2	-0.5	310	1.7	1.3	-1.1	300	3.0	2.6	-1.5	272	3.3	3.3	-0.1	240	4.2	3.6	2.1	108	4.6	-4.4	1.4			
12	270	0.8	0.8	0.0	293	1.5	1.4	-0.6	310	4.2	3.2	-2.7	314	5.6	4.0	-3.9	255	5.6	5.4	1.4	218	5.4	3.3	4.3	118	4.1	-3.6	1.9			
13	323	1.5	0.9	-1.2	304	1.1	0.9	-0.6	308	2.9	2.3	-1.8	308	4.4	3.5	-2.7	230	4.5	3.4	2.9	227	7.6	5.5	5.2	131	3.7	-2.8	2.4			
14	288	2.3	2.2	-0.7	286	0.7	0.7	-0.2	334	3.2	1.4	-2.9	304	2.2	1.8	-1.2	244	6.8	6.1	3.0	217	9.1	5.5	7.2	124	4.5	-3.7	2.5			
15	281	3.6	3.5	-0.7	243	0.9	0.8	0.4	347	1.3	0.3	-1.3	297	1.6	1.4	-0.7	243	7.2	6.4	3.2	224	7.2	5.0	5.2	127	5.8	-4.6	3.5			
16	315	1.1	0.8	-0.8	315	0.4	0.3	-0.3	24	1.2	-0.5	-1.1	288	1.3	1.2	-0.4	256	5.3	5.1	1.3	236	6.5	5.4	3.7	94	3.9	-3.9	0.3			
17	328	0.9	0.5	-0.8	345	1.1	0.3	-1.1	339	2.8	1.0	-2.6	217	2.0	1.2	1.6	252	5.4	5.1	1.7	220	4.0	2.6	3.1	109	5.7	-5.4	1.9			
18	198	0.6	0.2	0.6	263	0.8	0.8	0.1	325	2.9	1.7	-2.4	292	2.4	2.2	-0.9	277	2.6	2.6	-0.3	245	3.1	2.8	1.3	90	7.1	-7.1	0.0			
19	98	1.5	-1.5	0.2	270	0.7	0.7	0.0	323	2.5	1.5	-2.0	332	2.1	1.0	-1.9	261	3.1	3.1	0.5	260	2.2	2.2	0.4	124	5.2	-4.3	2.9			
20	202	0.5	0.2	0.5	9	0.6	-0.1	-0.6	342	1.9	0.6	-1.8	288	1.3	1.2	-0.4	250	4.9	4.6	1.7	240	5.1	4.4	2.5	109	5.4	-5.1	1.8			
21	267	3.3	3.3	0.2	317	2.1	1.4	-1.5	333	3.6	1.6	-3.2	282	3.8	3.7	-0.8	259	4.6	4.5	0.9	269	4.6	4.6	0.1	128	2.3	-1.8	1.4			
22	342	0.9	0.3	-0.9	308	1.8	1.4	-1.1	319	3.2	2.1	-2.4	240	3.4	3.0	1.7	261	6.5	6.4	1.0	261	6.6	6.5	1.0	201	2.8	1.0	2.6			
23	274	1.4	1.4	-0.1	283	2.3	2.2	-0.5	321	2.2	1.4	-1.7	286	3.3	3.2	-0.9	261	5.4	5.3	0.8	265	4.6	4.6	0.4	102	1.9	-1.9	0.4			
24	262	1.4	1.4	0.2	307	2.0	1.6	-1.2	348	2.9	0.6	-2.8	294	2.7	2.5	-1.1	257	7.4	7.2	1.6	261	7.3	7.2	1.1	174	1.0	-0.1	1.0			
25	305	1.2	1.0	-0.7	265	2.2	2.2	0.2	329	2.7	1.4	-2.3	264	1.8	1.8	0.2	254	7.2	6.9	2.0	246	7.2	6.6	2.9	157	2.8	-1.1	2.6			
26	142	1.8	-1.1	1.4	228	1.2	0.9	0.8	101	0.5	-0.5	0.1	297	0.9	0.8	-0.4	251	7.3	6.9	2.4	226	9.1	6.5	6.3	138	6.2	-4.1	4.6			
27	141	2.2	-1.4	1.7	260	1.1	1.1	0.2	360	0.8	0.0	-0.8	284	1.6	1.6	-0.4	248	7.4	6.9	2.8	233	7.9	6.3	4.8	133	3.4	-2.5	2.3			
28	321	1.9	1.2	-1.5	339	1.4	0.5	-1.3	360	1.5	0.0	-1.5	274	2.8	2.8	-0.2	242	9.2	8.1	4.3	238	7.8	6.6	4.1	270	0.1	0.1	0.0			
29	332	2.4	1.1	-2.1	319	2.9	1.9	-2.2	322	1.8	1.1	-1.4	247	3.9	3.6	1.5	240	8.9	7.7	4.4	240	9.5	8.2	4.7	163	3.1	-0.9	3.0			
30	284	2.9	2.8	-0.7	310	3.3	2.5	-2.1	333	3.4	1.5	-3.0	304	1.8	1.5	-1.0	257	8.8	8.6	2.0	254	9.3	8.9	2.6	183	1.7	0.1	1.7			
31	253	1.7	1.6	0.5	307	2.5	2.0	-1.5	333	4.6	2.1	-4.1	306	3.2	2.6	-1.9	244	10.2	9.2	4.5	235	9.6	7.9	5.5	188	2.8	0.4	2.8			

Daily Normals of Upper Air Winds (1971-2000)

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PATIALA

SEPTEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	294	3.4	3.1	-1.4	311	4.0	3.0	-2.6	322	3.3	2.0	-2.6	285	3.4	3.3	-0.9	254	10.1	9.7	2.8	234	10.8	8.8	6.3	207	1.8	0.8	1.6			
2	324	1.9	1.1	-1.5	343	3.1	0.9	-3.0	335	4.0	1.7	-3.6	320	2.6	1.7	-2.0	255	6.6	6.4	1.7	231	8.0	6.2	5.0	211	1.2	0.6	1.0			
3	338	1.1	0.4	-1.0	306	3.1	2.5	-1.8	306	2.6	2.1	-1.5	277	3.9	3.9	-0.5	251	10.3	9.8	3.3	258	10.0	9.8	2.1	227	2.1	1.5	1.4			
4	270	0.9	0.9	0.0	300	3.2	2.8	-1.6	337	4.0	1.6	-3.7	293	2.3	2.1	-0.9	253	6.6	6.3	1.9	259	6.7	6.6	1.3	127	0.5	-0.4	0.3			
5	191	1.0	0.2	1.0	311	2.8	2.1	-1.8	323	3.8	2.3	-3.0	285	4.2	4.1	-1.1	256	8.1	7.9	1.9	252	10.8	10.3	3.4	184	3.9	0.3	3.9			
6	6	1.9	-0.2	-1.9	311	3.7	2.8	-2.4	321	3.5	2.2	-2.7	263	1.6	1.6	0.2	268	10.8	10.8	0.3	258	11.9	11.6	2.5	218	3.7	2.3	2.9			
7	146	1.4	-0.8	1.2	301	2.3	2.0	-1.2	346	2.1	0.5	-2.0	257	2.2	2.1	0.5	271	8.4	8.4	-0.2	261	9.2	9.1	1.4	210	6.4	3.2	5.5			
8	125	3.7	-3.0	2.1	219	1.3	0.8	1.0	277	0.8	0.8	-0.1	235	3.8	3.1	2.2	252	8.5	8.1	2.6	244	8.1	7.3	3.5	208	2.4	1.1	2.1			
9	160	3.7	-1.3	3.5	253	2.1	2.0	0.6	305	2.9	2.4	-1.7	275	3.2	3.2	-0.3	255	10.9	10.5	2.8	235	9.3	7.6	5.4	224	5.5	3.8	4.0			
10	328	1.5	0.8	-1.3	283	2.8	2.7	-0.6	316	3.7	2.6	-2.7	260	5.7	5.6	1.0	253	10.7	10.2	3.2	253	11.6	11.1	3.4	210	2.2	1.1	1.9			
11	306	3.2	2.6	-1.9	309	5.3	4.1	-3.3	318	4.7	3.1	-3.5	264	4.1	4.1	0.4	265	10.7	10.7	0.9	261	11.7	11.5	1.9	250	4.0	3.8	1.4			
12	303	3.7	3.1	-2.0	311	5.5	4.1	-3.6	318	4.5	3.0	-3.3	292	4.1	3.8	-1.5	275	10.4	10.4	-1.0	275	10.7	10.7	-0.9	222	1.2	0.8	0.9			
13	320	3.3	2.1	-2.5	306	4.9	4.0	-2.9	318	5.0	3.3	-3.7	275	3.7	3.7	-0.3	269	10.0	10.0	0.1	259	11.9	11.7	2.2	230	3.8	2.9	2.4			
14	342	3.5	1.1	-3.3	313	5.0	3.7	-3.4	314	5.5	4.0	-3.8	282	4.0	3.9	-0.8	266	10.6	10.6	0.7	264	11.3	11.2	1.2	312	2.4	1.8	-1.6			
15	326	2.7	1.5	-2.2	311	4.1	3.1	-2.7	326	4.2	2.4	-3.5	289	3.4	3.2	-1.1	259	11.2	11.0	2.1	263	12.4	12.3	1.5	243	4.8	4.3	2.2			
16	292	4.0	3.7	-1.5	313	4.7	3.4	-3.2	320	4.5	2.9	-3.4	258	1.4	1.4	0.3	263	12.5	12.4	1.6	261	14.3	14.1	2.3	243	3.5	3.1	1.6			
17	301	4.7	4.0	-2.4	317	4.2	2.9	-3.1	335	3.8	1.6	-3.5	278	2.2	2.2	-0.3	255	11.3	10.9	3.0	247	13.2	12.2	5.1	302	2.5	2.1	-1.3			
18	292	4.1	3.8	-1.5	310	4.3	3.3	-2.8	320	3.3	2.1	-2.5	281	4.2	4.1	-0.8	259	12.7	12.5	2.5	259	13.3	13.1	2.5	237	6.4	5.3	3.5			
19	300	3.6	3.1	-1.8	316	4.6	3.2	-3.3	317	4.4	3.0	-3.2	280	2.3	2.3	-0.4	255	12.2	11.8	3.1	258	14.5	14.2	3.1	260	5.7	5.6	1.0			
20	321	2.6	1.6	-2.0	299	4.1	3.6	-2.0	308	4.3	3.4	-2.7	280	4.6	4.5	-0.8	254	15.3	14.7	4.2	252	17.9	17.1	5.4	267	6.8	6.8	0.4			
21	299	4.5	3.9	-2.2	318	3.6	2.4	-2.7	304	3.0	2.5	-1.7	271	4.4	4.4	-0.1	257	15.0	14.6	3.3	252	19.0	18.1	5.8	256	6.4	6.2	1.5			
22	291	4.4	4.1	-1.6	310	3.1	2.4	-2.0	306	3.9	3.2	-2.3	264	4.0	4.0	0.4	259	13.6	13.3	2.6	257	16.0	15.6	3.7	250	9.2	8.7	3.1			
23	317	5.2	3.6	-3.8	323	4.3	2.6	-3.4	324	3.6	2.1	-2.9	279	5.6	5.5	-0.9	260	13.8	13.6	2.3	258	18.5	18.1	3.9	269	9.0	9.0	0.2			
24	306	3.4	2.8	-2.0	323	3.8	2.3	-3.0	318	6.2	4.2	-4.6	286	5.8	5.6	-1.6	263	14.8	14.7	1.9	265	14.0	13.9	1.2	288	7.6	7.2	-2.3			
25	293	4.0	3.7	-1.6	317	3.5	2.4	-2.6	307	3.0	2.4	-1.8	292	6.7	6.2	-2.5	264	17.0	16.9	1.7	261	18.8	18.6	3.0	256	6.7	6.5	1.6			
26	297	3.0	2.7	-1.4	305	3.9	3.2	-2.2	309	4.5	3.5	-2.8	299	7.0	6.1	-3.4	269	18.8	18.8	0.4	264	16.7	16.6	1.7	272	9.2	9.2	-0.3			
27	303	5.6	4.7	-3.1	316	4.2	2.9	-3.0	322	5.2	3.2	-4.1	301	5.6	4.8	-2.9	265	18.5	18.4	1.7	259	21.5	21.1	4.0	240	8.2	7.1	4.1			
28	301	6.9	5.9	-3.6	312	4.7	3.5	-3.2	317	6.6	4.5	-4.8	275	7.3	7.3	-0.6	268	18.0	18.0	0.5	264	20.7	20.6	2.0	264	11.1	11.0	1.1			
29	303	4.8	4.0	-2.6	308	5.6	4.4	-3.4	318	5.1	3.4	-3.8	290	7.9	7.4	-2.7	269	19.7	19.7	0.5	274	20.4	20.4	-1.3	276	11.8	11.7	-1.2			
30	315	4.4	3.1	-3.1	310	4.3	3.3	-2.8	315	5.9	4.2	-4.2	289	7.5	7.1	-2.4	264	18.8	18.7	2.1	253	21.4	20.5	6.1	257	12.1	11.8	2.8			

Daily Normals of Upper Air Winds (1971-2000)

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PATIALA

OCTOBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	323	4.4	2.6	-3.5	311	4.4	3.3	-2.9	314	6.1	4.4	-4.2	303	7.1	5.9	-3.9	271	18.0	18.0	-0.3	265	21.3	21.2	2.0	262	10.6	10.5	1.5			
2	295	2.1	1.9	-0.9	305	4.7	3.9	-2.7	308	4.6	3.6	-2.8	291	7.7	7.2	-2.8	273	19.7	19.7	-1.0	261	22.9	22.6	3.6	257	11.9	11.6	2.6			
3	315	2.0	1.4	-1.4	302	4.0	3.4	-2.1	317	5.3	3.6	-3.9	294	7.0	6.4	-2.9	269	17.2	17.2	0.3	267	22.3	22.3	1.1	261	10.7	10.6	1.7			
4	309	1.4	1.1	-0.9	312	3.6	2.7	-2.4	312	4.6	3.4	-3.1	296	5.0	4.5	-2.2	276	16.6	16.5	-1.7	263	20.4	20.2	2.6	268	13.4	13.4	0.4			
5	306	0.9	0.7	-0.5	293	3.0	2.8	-1.2	333	2.0	0.9	-1.8	294	7.7	7.1	-3.1	277	18.4	18.3	-2.3	266	27.1	27.0	1.8	263	10.9	10.8	1.3			
6	307	2.6	2.1	-1.6	316	4.2	2.9	-3.0	321	3.6	2.3	-2.8	294	6.6	6.0	-2.7	274	20.5	20.4	-1.5	265	25.2	25.1	2.0	257	11.2	10.9	2.5			
7	318	5.4	3.6	-4.0	308	4.3	3.4	-2.7	335	4.2	1.8	-3.8	293	5.7	5.3	-2.2	275	18.8	18.7	-1.7	265	27.3	27.2	2.2	262	15.9	15.8	2.1			
8	324	4.6	2.7	-3.7	311	4.4	3.3	-2.9	306	3.4	2.8	-2.0	300	5.9	5.1	-2.9	283	19.2	18.7	-4.3	275	28.7	28.6	-2.4	261	13.2	13.0	2.0			
9	322	4.6	2.8	-3.6	307	4.1	3.3	-2.5	321	4.3	2.7	-3.3	289	9.6	9.1	-3.1	275	25.1	25.0	-2.1	269	29.1	29.1	0.6	264	17.5	17.4	1.8			
10	327	4.0	2.2	-3.4	304	4.6	3.8	-2.6	311	6.2	4.7	-4.1	285	9.8	9.4	-2.6	274	26.0	25.9	-1.8	266	31.9	31.8	2.0	253	15.4	14.7	4.5			
11	310	3.5	2.7	-2.3	322	4.3	2.7	-3.4	298	4.4	3.9	-2.1	274	8.9	8.9	-0.6	271	24.5	24.5	-0.3	265	30.5	30.4	2.8	245	14.5	13.2	6.1			
12	326	4.0	2.2	-3.3	319	3.7	2.4	-2.8	307	5.3	4.2	-3.2	283	9.2	9.0	-2.1	270	25.8	25.8	-0.2	267	30.8	30.8	1.6	270	17.3	17.3	-0.1			
13	321	4.3	2.7	-3.3	306	4.4	3.6	-2.6	309	5.7	4.4	-3.6	279	7.6	7.5	-1.2	265	25.5	25.4	2.3	259	34.0	33.4	6.6	246	19.0	17.4	7.6			
14	308	6.0	4.7	-3.7	316	5.3	3.7	-3.8	320	6.0	3.9	-4.6	295	8.7	7.9	-3.7	275	25.3	25.2	-2.4	271	31.0	31.0	-0.4	268	18.8	18.8	0.7			
15	308	3.9	3.1	-2.4	324	4.4	2.6	-3.6	309	4.3	3.3	-2.7	286	8.6	8.3	-2.4	276	25.3	25.2	-2.5	272	31.1	31.1	-1.2	265	15.4	15.3	1.4			
16	337	3.0	1.2	-2.8	316	3.5	2.4	-2.5	295	4.3	3.9	-1.8	279	6.8	6.7	-1.1	275	25.4	25.3	-2.2	260	31.6	31.2	5.3	266	14.3	14.3	0.9			
17	335	2.9	1.2	-2.6	308	3.9	3.1	-2.4	300	3.2	2.8	-1.6	266	8.2	8.2	0.6	265	25.4	25.3	2.3	261	34.5	34.1	5.5	255	15.7	15.2	4.1			
18	315	2.4	1.7	-1.7	303	2.7	2.3	-1.5	291	2.6	2.4	-0.9	284	8.9	8.6	-2.1	270	28.2	28.2	-0.2	264	35.9	35.7	3.8	260	15.5	15.2	2.8			
19	324	4.7	2.8	-3.8	308	3.6	2.8	-2.2	305	4.0	3.3	-2.3	279	9.7	9.6	-1.6	271	27.2	27.2	-0.3	263	32.3	32.1	3.9	270	15.4	15.4	-0.1			
20	316	2.9	2.0	-2.1	317	3.7	2.5	-2.7	292	3.1	2.9	-1.2	287	10.4	10.0	-3.0	275	29.1	29.0	-2.6	266	35.9	35.8	2.2	264	20.6	20.5	2.1			
21	306	4.2	3.4	-2.5	315	4.9	3.5	-3.5	319	4.3	2.8	-3.2	291	8.5	8.0	-3.0	276	27.4	27.2	-2.9	265	32.3	32.2	2.8	265	18.0	17.9	1.7			
22	323	5.8	3.5	-4.6	314	4.5	3.2	-3.1	310	3.4	2.6	-2.2	288	8.7	8.3	-2.7	272	25.1	25.1	-0.8	270	34.1	34.1	0.1	275	23.7	23.6	-2.0			
23	306	4.4	3.6	-2.6	320	4.5	2.9	-3.4	306	3.1	2.5	-1.8	279	8.6	8.5	-1.3	271	26.9	26.9	-0.5	265	33.8	33.7	2.7	267	15.2	15.2	0.9			
24	310	3.9	3.0	-2.5	313	4.0	2.9	-2.7	318	2.7	1.8	-2.0	288	7.9	7.5	-2.4	277	25.8	25.6	-3.2	266	36.6	36.5	2.3	276	16.7	16.6	-1.6			
25	309	3.5	2.7	-2.2	316	4.7	3.3	-3.4	301	4.2	3.6	-2.2	287	8.8	8.4	-2.5	277	25.4	25.2	-3.2	271	35.3	35.3	-0.4	274	24.4	24.3	-1.7			
26	320	6.2	4.0	-4.8	306	4.3	3.5	-2.5	302	3.6	3.1	-1.9	288	8.6	8.2	-2.7	275	24.1	24.0	-1.9	270	35.0	35.0	0.2	272	21.1	21.1	-0.8			
27	312	5.5	4.1	-3.7	316	4.6	3.2	-3.3	319	4.0	2.6	-3.0	287	6.6	6.3	-1.9	277	22.6	22.4	-2.7	270	30.6	30.6	0.1	269	18.8	18.8	0.4			
28	333	3.9	1.8	-3.5	327	3.0	1.6	-2.5	306	4.3	3.5	-2.5	286	7.4	7.1	-2.0	274	22.0	22.0	-1.4	270	31.3	31.3	0.1	270	16.6	16.6	-0.1			
29	335	2.6	1.1	-2.4	298	3.0	2.6	-1.4	311	3.5	2.6	-2.3	289	9.3	8.8	-3.0	282	22.3	21.8	-4.6	272	28.8	28.8	-0.9	271	24.1	24.1	-0.6			
30	325	2.1	1.2	-1.7	313	3.5	2.6	-2.4	312	3.1	2.3	-2.1	283	7.9	7.7	-1.8	269	21.2	21.2	0.2	262	35.0	34.7	4.8	271	20.5	20.5	-0.3			
31	322	1.8	1.1	-1.4	311	3.3	2.5	-2.2	311	2.8	2.1	-1.8	292	8.5	7.9	-3.2	280	22.8	22.5	-3.8	271	31.6	31.6	-0.6	270	17.0	17.0	0.1			

Daily Normals of Upper Air Winds (1971-2000)

311

PATIALA

NOVEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	309	1.9	1.5	-1.2	315	3.4	2.4	-2.4	353	1.6	0.2	-1.6	285	9.5	9.2	-2.4	277	23.6	23.4	-2.7	269	33.6	33.6	0.6	272	16.7	16.7	-0.5			
2	315	3.8	2.7	-2.7	321	3.6	2.3	-2.8	321	3.5	2.2	-2.7	288	9.5	9.0	-2.9	282	25.6	25.0	-5.4	280	35.2	34.7	-6.1	288	19.0	18.1	-5.8			
3	319	4.0	2.6	-3.0	326	2.9	1.6	-2.4	297	3.6	3.2	-1.6	272	9.9	9.9	-0.4	275	26.7	26.6	-2.1	267	35.2	35.2	1.6	272	22.9	22.9	-0.6			
4	325	2.4	1.4	-2.0	314	3.7	2.7	-2.6	308	3.6	2.8	-2.2	288	9.8	9.3	-3.1	278	30.2	29.9	-4.0	275	35.0	34.9	-2.9	272	22.5	22.5	-0.8			
5	309	2.1	1.6	-1.3	309	4.5	3.5	-2.8	312	4.6	3.4	-3.1	283	11.2	10.9	-2.6	283	29.1	28.4	-6.4	269	34.7	34.7	0.6	281	19.1	18.7	-3.8			
6	328	1.3	0.7	-1.1	311	3.5	2.6	-2.3	299	3.7	3.2	-1.8	290	9.6	9.0	-3.2	280	26.2	25.8	-4.4	268	38.9	38.9	1.2	268	20.9	20.9	0.8			
7	291	2.8	2.6	-1.0	320	3.5	2.3	-2.7	314	3.5	2.5	-2.4	284	10.3	10.0	-2.5	272	25.8	25.8	-0.7	267	42.6	42.5	2.2	273	24.5	24.5	-1.1			
8	336	2.0	0.8	-1.8	326	3.0	1.7	-2.5	289	2.1	2.0	-0.7	287	10.4	9.9	-3.1	275	30.7	30.6	-2.7	264	32.1	31.9	3.2	266	19.8	19.8	1.4			
9	342	3.9	1.2	-3.7	333	3.8	1.7	-3.4	316	4.6	3.2	-3.3	288	10.4	9.9	-3.2	280	29.5	29.1	-4.9	271	33.8	33.8	-0.5	269	23.7	23.7	0.6			
10	319	4.9	3.2	-3.7	312	4.7	3.5	-3.2	313	5.2	3.8	-3.5	293	11.3	10.4	-4.4	284	24.3	23.5	-6.0	277	33.6	33.4	-4.0	271	18.7	18.7	-0.2			
11	317	2.2	1.5	-1.6	321	3.5	2.2	-2.7	275	2.4	2.4	-0.2	288	12.0	11.4	-3.8	278	25.6	25.3	-3.6	276	40.6	40.4	-4.1	275	21.7	21.6	-1.9			
12	322	5.4	3.3	-4.3	325	3.7	2.1	-3.0	310	4.0	3.1	-2.6	284	10.2	9.9	-2.4	282	29.9	29.2	-6.2	282	33.5	32.8	-6.7	275	25.1	25.0	-2.1			
13	320	4.5	2.9	-3.4	315	4.0	2.8	-2.8	309	4.6	3.6	-2.9	298	12.3	10.8	-5.8	276	32.1	31.9	-3.5	276	40.9	40.7	-4.0	277	20.4	20.2	-2.6			
14	321	4.5	2.8	-3.5	325	3.7	2.1	-3.0	319	4.9	3.2	-3.7	287	12.7	12.2	-3.7	277	28.5	28.3	-3.7	268	35.6	35.6	1.3	277	26.8	26.6	-3.3			
15	322	4.2	2.6	-3.3	309	4.0	3.1	-2.5	307	3.9	3.1	-2.3	282	11.5	11.3	-2.3	270	25.9	25.9	0.0	278	31.4	31.1	-4.5	276	22.1	22.0	-2.5			
16	319	4.5	3.0	-3.4	312	3.9	2.9	-2.6	314	3.5	2.5	-2.4	280	12.5	12.3	-2.1	271	33.5	33.5	-0.8	269	38.3	38.3	0.5	274	29.0	28.9	-2.2			
17	315	3.1	2.2	-2.2	319	3.2	2.1	-2.4	314	3.6	2.6	-2.5	273	12.3	12.3	-0.7	267	30.9	30.8	1.8	266	38.5	38.4	2.8	269	29.0	29.0	0.6			
18	316	2.9	2.0	-2.1	316	3.9	2.7	-2.8	313	4.0	2.9	-2.7	291	11.6	10.9	-4.1	275	28.9	28.8	-2.4	271	40.3	40.3	-1.0	274	36.7	36.6	-2.8			
19	342	2.0	0.6	-1.9	314	3.2	2.3	-2.2	282	2.5	2.4	-0.5	287	11.2	10.7	-3.3	274	27.1	27.0	-2.1	264	38.3	38.1	4.0	272	32.3	32.3	-1.4			
20	316	3.0	2.1	-2.2	305	3.8	3.1	-2.2	298	2.7	2.4	-1.3	288	10.8	10.3	-3.3	279	29.5	29.1	-4.6	265	33.5	33.4	3.1	273	25.5	25.5	-1.5			
21	308	4.2	3.3	-2.6	311	3.2	2.4	-2.1	283	1.8	1.8	-0.4	269	12.2	12.2	0.3	264	31.3	31.1	3.1	259	35.7	35.0	6.8	272	22.0	22.0	-0.9			
22	304	2.2	1.8	-1.2	295	2.3	2.1	-1.0	279	1.2	1.2	-0.2	273	10.3	10.3	-0.5	267	26.9	26.9	1.4	270	31.6	31.6	0.2	279	21.6	21.3	-3.3			
23	322	6.0	3.7	-4.7	320	3.4	2.2	-2.6	299	2.1	1.8	-1.0	289	10.5	9.9	-3.5	281	26.9	26.4	-4.9	269	40.2	40.2	0.4	271	28.5	28.5	-0.4			
24	319	7.4	4.9	-5.6	311	4.9	3.7	-3.2	294	3.0	2.7	-1.2	268	12.1	12.1	0.4	269	29.4	29.4	0.7	271	39.6	39.6	-0.8	262	22.9	22.7	3.2			
25	314	7.5	5.4	-5.2	324	4.4	2.6	-3.6	301	3.1	2.7	-1.6	270	10.9	10.9	0.0	268	33.6	33.6	1.2	265	37.9	37.8	3.3	260	26.7	26.3	4.7			
26	304	5.0	4.2	-2.8	293	3.4	3.1	-1.3	270	1.8	1.8	0.0	278	12.6	12.5	-1.8	263	34.6	34.3	4.2	265	44.4	44.2	4.1	250	24.1	22.6	8.3			
27	308	3.1	2.4	-1.9	292	3.2	3.0	-1.2	268	2.5	2.5	0.1	263	14.4	14.3	1.7	268	33.1	33.1	1.1	261	40.8	40.3	6.3	269	25.5	25.5	0.4			
28	315	2.7	1.9	-1.9	322	3.9	2.4	-3.1	296	3.9	3.5	-1.7	283	14.4	14.0	-3.2	274	34.6	34.5	-2.6	267	41.5	41.5	2.0	277	30.5	30.3	-3.5			
29	317	5.7	3.9	-4.2	318	4.5	3.0	-3.3	291	2.8	2.6	-1.0	271	12.6	12.6	-0.2	267	24.7	24.7	1.2	267	36.2	36.1	2.1	275	39.3	39.1	-3.7			
30	304	5.3	4.4	-3.0	311	4.3	3.2	-2.8	279	3.1	3.1	-0.5	275	13.9	13.9	-1.1	270	31.1	31.1	0.2	265	42.6	42.4	4.0	265	22.1	22.0	1.8			

Daily Normals of Upper Air Winds (1971-2000)

PATIALA

DECEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	300	3.8	3.3	-1.9	333	2.9	1.3	-2.6	308	3.7	2.9	-2.3	276	11.9	11.8	-1.2	267	29.4	29.4	1.5	271	38.0	38.0	-0.9	261	32.5	32.1	4.9
2	317	4.9	3.3	-3.6	318	2.7	1.8	-2.0	305	2.8	2.3	-1.6	271	12.0	12.0	-0.2	269	27.3	27.3	0.3	268	38.7	38.7	1.3	271	30.9	30.9	-0.6
3	324	2.9	1.7	-2.3	323	3.1	1.9	-2.5	294	3.7	3.4	-1.5	272	13.1	13.1	-0.5	265	30.8	30.7	2.9	263	34.9	34.6	4.5	256	21.6	21.0	5.2
4	316	5.2	3.6	-3.7	327	5.9	3.2	-5.0	308	5.4	4.3	-3.3	276	14.0	13.9	-1.5	269	31.3	31.3	0.5	266	45.9	45.8	3.4	267	26.2	26.2	1.6
5	314	5.9	4.3	-4.1	322	5.3	3.3	-4.2	301	4.3	3.7	-2.2	277	13.6	13.5	-1.6	271	31.9	31.9	-0.5	266	39.1	39.0	2.4	269	35.5	35.5	0.7
6	310	4.5	3.5	-2.9	313	4.1	3.0	-2.8	293	3.3	3.0	-1.3	272	11.9	11.9	-0.4	267	30.7	30.7	1.5	263	44.8	44.4	5.7	265	28.5	28.4	2.4
7	314	4.0	2.9	-2.8	321	3.3	2.1	-2.6	287	4.2	4.0	-1.2	274	15.3	15.3	-1.1	272	32.4	32.4	-1.1	264	48.6	48.3	5.5	265	29.2	29.1	2.4
8	321	4.9	3.1	-3.8	324	2.2	1.3	-1.8	267	4.2	4.2	0.2	273	13.2	13.2	-0.7	269	30.6	30.6	0.7	266	40.4	40.3	2.7	274	32.1	32.0	-2.4
9	313	4.2	3.1	-2.9	312	2.7	2.0	-1.8	292	4.0	3.7	-1.5	271	12.0	12.0	-0.3	271	27.5	27.5	-0.5	262	36.6	36.3	4.9	264	24.6	24.5	2.6
10	315	4.9	3.5	-3.5	335	2.3	1.0	-2.1	305	3.8	3.1	-2.2	278	10.5	10.4	-1.4	274	30.8	30.7	-2.4	275	39.0	38.9	-3.4	275	32.0	31.9	-2.8
11	317	5.3	3.6	-3.9	320	3.0	1.9	-2.3	287	3.7	3.5	-1.1	272	14.4	14.4	-0.4	268	32.7	32.7	1.3	264	40.0	39.8	4.3	267	30.3	30.3	1.4
12	313	5.3	3.9	-3.6	312	4.6	3.4	-3.1	291	3.6	3.4	-1.3	275	12.5	12.5	-1.0	273	32.9	32.9	-1.6	266	40.9	40.8	2.9	279	25.3	25.0	-4.0
13	314	5.7	4.1	-4.0	318	4.3	2.9	-3.2	307	4.4	3.5	-2.6	276	13.0	12.9	-1.3	270	29.2	29.2	-0.2	262	32.9	32.6	4.3	275	27.0	26.9	-2.2
14	312	6.0	4.5	-4.0	315	3.7	2.6	-2.6	295	4.2	3.8	-1.8	279	14.7	14.5	-2.2	271	31.3	31.3	-0.6	277	40.9	40.6	-4.7	271	27.2	27.2	-0.7
15	314	7.1	5.1	-5.0	320	3.9	2.5	-3.0	289	3.9	3.7	-1.3	286	13.8	13.3	-3.7	281	31.6	31.0	-6.0	279	41.2	40.7	-6.4	278	27.7	27.5	-3.7
16	331	3.3	1.6	-2.9	324	3.9	2.3	-3.2	296	4.1	3.7	-1.8	271	11.9	11.9	-0.3	277	27.8	27.6	-3.5	273	35.7	35.6	-2.0	269	28.8	28.8	0.3
17	324	4.7	2.8	-3.8	319	3.8	2.5	-2.9	288	4.9	4.7	-1.5	278	13.6	13.5	-1.9	281	31.6	31.0	-5.9	275	39.0	38.8	-3.5	273	24.6	24.6	-1.4
18	323	3.8	2.3	-3.0	325	3.5	2.0	-2.9	290	4.8	4.5	-1.6	281	13.2	13.0	-2.5	275	29.0	28.9	-2.7	271	38.9	38.9	-0.7	276	24.8	24.6	-2.8
19	322	3.4	2.1	-2.7	337	2.1	0.8	-1.9	282	3.5	3.4	-0.7	277	14.3	14.2	-1.7	270	29.1	29.1	-0.2	272	41.9	41.9	-1.5	277	27.0	26.8	-3.3
20	318	2.7	1.8	-2.0	289	1.8	1.7	-0.6	280	3.4	3.3	-0.6	286	14.4	13.8	-4.0	278	32.2	31.9	-4.3	271	41.0	41.0	-0.4	276	26.1	25.9	-2.8
21	321	3.2	2.0	-2.5	320	3.4	2.2	-2.6	305	4.0	3.3	-2.3	284	12.7	12.3	-3.0	282	29.1	28.5	-5.8	273	42.5	42.4	-2.5	281	23.6	23.2	-4.3
22	309	3.3	2.6	-2.1	306	3.1	2.5	-1.8	301	3.7	3.2	-1.9	274	12.6	12.6	-0.9	272	28.6	28.6	-1.0	272	43.5	43.5	-1.7	268	29.9	29.9	1.1
23	317	3.4	2.3	-2.5	331	3.7	1.8	-3.2	298	2.1	1.9	-1.0	276	13.9	13.8	-1.5	269	31.6	31.6	0.3	267	43.0	43.0	1.9	266	27.1	27.0	1.8
24	313	3.3	2.4	-2.2	338	3.5	1.3	-3.3	225	1.3	0.9	0.9	285	8.3	8.0	-2.2	280	28.2	27.8	-4.8	280	40.5	39.9	-6.8	275	30.6	30.5	-2.7
25	299	2.5	2.2	-1.2	320	0.8	0.5	-0.6	262	2.1	2.1	0.3	267	10.2	10.2	0.5	271	24.9	24.9	-0.5	270	34.4	34.4	0.1	278	23.6	23.4	-3.3
26	327	4.4	2.4	-3.7	337	1.5	0.6	-1.4	216	1.7	1.0	1.4	279	10.7	10.6	-1.6	274	30.3	30.2	-2.1	274	42.3	42.2	-3.0	273	36.7	36.7	-1.9
27	336	3.0	1.2	-2.7	302	1.5	1.3	-0.8	291	1.9	1.8	-0.7	285	11.7	11.3	-3.0	273	31.8	31.8	-1.7	278	44.6	44.1	-6.5	274	25.7	25.6	-1.9
28	298	2.1	1.9	-1.0	280	1.1	1.1	-0.2	257	2.8	2.7	0.6	277	14.9	14.8	-1.8	275	32.4	32.3	-2.9	274	45.5	45.4	-2.8	283	28.6	27.9	-6.4
29	311	3.5	2.6	-2.3	316	3.0	2.1	-2.2	295	2.3	2.1	-1.0	281	14.6	14.3	-2.7	275	33.3	33.2	-3.1	274	42.6	42.5	-3.0	276	28.8	28.7	-2.8
30	316	5.3	3.7	-3.8	333	4.6	2.1	-4.1	306	4.9	4.0	-2.9	293	15.7	14.4	-6.2	281	32.0	31.5	-5.9	274	42.2	42.1	-2.8	263	38.2	37.9	4.5
31	322	3.3	2.0	-2.6	322	3.1	1.9	-2.4	283	1.8	1.8	-0.4	279	13.0	12.8	-2.1	275	30.2	30.1	-2.7	270	40.7	40.7	0.0	265	35.7	35.5	3.3

Daily Normals of Upper Air Winds (1971-2000)

PATNA

JANUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	284	3.7	3.6	-0.9	288	4.6	4.4	-1.4	292	11.5	10.7	-4.3	287	23.5	22.4	-7.0	288	48.5	46.2	-14.6	283	45.2	44.1	-10.1	282	26.0	25.4	-5.4
2	293	4.0	3.7	-1.6	304	4.3	3.6	-2.4	295	10.1	9.1	-4.3	289	21.4	20.3	-6.9	277	38.2	37.9	-4.5	279	50.9	50.3	-8.0	—	—	—	—
3	324	1.7	1.0	-1.4	308	3.1	2.4	-1.9	299	11.5	10.0	-5.6	291	19.4	18.1	-7.1	281	39.5	38.7	-7.8	280	39.4	38.8	-7.0	—	—	—	—
4	285	2.7	2.6	-0.7	287	3.7	3.5	-1.1	301	9.8	8.4	-5.1	283	19.5	19.0	-4.4	293	34.9	32.1	-13.6	282	53.3	52.1	-11.3	281	34.0	33.4	-6.5
5	292	2.2	2.0	-0.8	309	3.2	2.5	-2.0	299	12.0	10.5	-5.8	280	21.0	20.7	-3.8	277	47.9	47.5	-6.2	273	58.0	57.9	-3.0	—	—	—	—
6	323	2.0	1.2	-1.6	281	3.2	3.1	-0.6	300	10.8	9.3	-5.4	281	20.1	19.8	-3.7	279	51.2	50.6	-7.9	271	48.3	48.3	-0.6	—	—	—	—
7	314	3.5	2.5	-2.4	298	2.6	2.3	-1.2	286	10.2	9.8	-2.8	277	20.0	19.8	-2.6	281	41.7	40.9	-8.1	291	45.0	41.9	-16.3	—	—	—	—
8	6	1.9	-0.2	-1.9	299	3.1	2.7	-1.5	284	9.6	9.3	-2.3	268	21.9	21.9	0.6	272	52.3	52.3	-1.9	—	—	—	—	—	—	—	—
9	290	4.0	3.8	-1.4	282	4.8	4.7	-1.0	287	10.5	10.0	-3.1	268	21.9	21.9	0.7	280	46.9	46.1	-8.4	277	47.7	47.3	-5.9	—	—	—	—
10	294	4.3	3.9	-1.7	302	6.0	5.1	-3.2	289	10.7	10.1	-3.5	273	25.9	25.9	-1.5	262	45.3	44.9	6.2	261	52.5	51.8	8.3	—	—	—	—
11	293	4.8	4.4	-1.9	286	5.0	4.8	-1.4	285	10.6	10.3	-2.7	275	28.9	28.8	-2.6	282	41.5	40.6	-8.6	275	46.2	46.0	-4.3	—	—	—	—
12	281	5.7	5.6	-1.1	297	6.6	5.9	-3.0	286	13.7	13.2	-3.8	279	26.5	26.2	-4.2	268	47.1	47.1	1.4	292	53.6	49.9	-19.7	—	—	—	—
13	285	5.9	5.7	-1.5	277	4.1	4.1	-0.5	299	11.4	10.0	-5.5	276	23.4	23.3	-2.6	270	45.1	45.1	0.2	285	34.5	33.2	-9.2	266	13.0	13.0	0.9
14	277	3.8	3.8	-0.5	299	6.0	5.2	-2.9	294	14.0	12.8	-5.7	284	22.2	21.6	-5.3	270	43.8	43.8	0.0	269	53.6	53.6	0.5	—	—	—	—
15	110	3.3	-3.1	1.1	284	2.9	2.8	-0.7	285	9.2	8.9	-2.4	274	23.9	23.9	-1.5	273	45.9	45.8	-2.6	239	57.1	48.9	29.4	—	—	—	—
16	299	3.1	2.7	-1.5	301	5.6	4.8	-2.9	285	12.0	11.6	-3.0	283	26.9	26.2	-6.2	282	46.7	45.7	-9.8	280	53.7	52.9	-9.3	—	—	—	—
17	297	6.2	5.5	-2.8	303	7.2	6.0	-3.9	291	13.4	12.5	-4.7	287	24.5	23.5	-7.1	278	42.3	41.9	-5.6	291	49.2	45.9	-17.8	—	—	—	—
18	293	5.2	4.8	-2.0	291	6.5	6.1	-2.3	293	13.6	12.5	-5.4	285	22.2	21.5	-5.6	275	35.3	35.2	-3.0	293	46.9	43.3	-18.0	—	—	—	—
19	272	2.4	2.4	-0.1	293	5.2	4.8	-2.0	289	13.3	12.5	-4.4	284	26.1	25.3	-6.4	272	40.6	40.6	-1.7	290	41.0	38.5	-14.0	—	—	—	—
20	189	2.0	0.3	2.0	286	6.5	6.2	-1.8	288	13.3	12.6	-4.1	275	24.8	24.7	-2.0	279	48.1	47.5	-7.4	275	50.9	50.7	-4.1	—	—	—	—
21	275	6.0	6.0	-0.5	287	7.0	6.7	-2.1	289	13.7	13.0	-4.4	286	26.5	25.5	-7.2	272	44.2	44.2	-1.4	272	44.1	44.1	-1.8	283	26.0	25.3	-5.8
22	284	6.8	6.6	-1.7	300	9.3	8.0	-4.7	296	14.0	12.6	-6.1	287	27.0	25.9	-7.7	270	42.4	42.4	-0.3	255	52.0	50.2	13.5	—	—	—	—
23	282	6.8	6.7	-1.4	299	9.6	8.4	-4.6	297	15.7	14.0	-7.0	289	27.9	26.4	-9.1	270	46.9	46.9	0.0	277	39.6	39.3	-4.6	282	29.0	28.4	-6.0
24	287	8.0	7.7	-2.3	297	11.1	9.9	-5.0	300	18.0	15.6	-8.9	288	31.0	29.5	-9.4	276	49.2	48.9	-5.5	277	35.6	35.3	-4.5	—	—	—	—
25	287	7.1	6.8	-2.1	304	10.7	8.8	-6.0	301	16.7	14.2	-8.7	286	26.6	25.6	-7.2	271	34.7	34.7	-0.7	273	46.2	46.1	-2.3	—	—	—	—
26	281	5.3	5.2	-1.0	299	7.8	6.8	-3.8	296	14.9	13.4	-6.5	292	22.8	21.2	-8.4	275	45.8	45.6	-3.9	268	43.0	43.0	1.5	—	—	—	—
27	288	2.8	2.7	-0.9	303	5.6	4.7	-3.1	296	12.6	11.3	-5.5	285	23.0	22.2	-5.9	265	40.6	40.4	3.5	263	46.7	46.4	5.7	280	29.0	28.6	-5.0
28	298	5.1	4.5	-2.4	300	7.7	6.7	-3.8	301	14.2	12.2	-7.2	279	23.7	23.4	-3.6	264	38.0	37.8	4.3	258	42.2	41.3	8.7	—	—	—	—
29	293	6.3	5.8	-2.5	304	10.0	8.3	-5.6	294	14.4	13.1	-5.9	279	27.2	26.8	-4.4	270	48.6	48.6	0.1	282	56.3	55.0	-11.8	—	—	—	—
30	276	6.8	6.8	-0.7	288	7.8	7.4	-2.4	291	14.0	13.1	-4.9	283	26.3	25.7	-5.8	279	46.2	45.6	-7.6	257	54.0	52.6	12.1	—	—	—	—
31	276	3.8	3.8	-0.4	286	5.7	5.5	-1.6	295	13.1	11.8	-5.6	284	24.5	23.8	-5.9	282	53.3	52.2	-11.0	261	51.8	51.2	7.7	—	—	—	—

Daily Normals of Upper Air Winds (1971-2000)

315

PATNA

MARCH

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	282	6.0	5.9	-1.3	289	6.5	6.2	-2.1	292	16.7	15.5	-6.2	286	26.3	25.2	-7.4	279	39.5	39.1	-5.9	259	40.0	39.3	7.4	—	—	—	—			
2	279	6.9	6.8	-1.1	290	9.5	8.9	-3.3	294	15.4	14.1	-6.2	290	21.8	20.5	-7.5	284	36.0	34.9	-9.0	279	34.2	33.7	-5.6	291	17.0	15.9	-6.1			
3	285	7.4	7.2	-1.9	292	9.4	8.7	-3.5	295	12.7	11.5	-5.4	288	22.2	21.1	-6.9	287	47.3	45.1	-14.1	295	35.5	32.1	-15.1	327	14.8	8.1	-12.4			
4	272	7.1	7.1	-0.2	290	8.5	8.0	-2.9	290	14.0	13.2	-4.7	287	25.5	24.4	-7.4	281	37.6	36.9	-7.2	292	39.2	36.3	-14.9	307	31.1	24.8	-18.7			
5	292	7.4	6.9	-2.8	298	9.8	8.6	-4.6	285	14.0	13.5	-3.6	282	24.2	23.6	-5.2	279	35.4	34.9	-5.7	289	29.6	27.9	-9.8	260	29.0	28.5	5.1			
6	288	7.1	6.8	-2.2	287	9.3	8.9	-2.7	289	13.8	13.0	-4.6	280	24.3	23.9	-4.3	266	42.0	41.9	2.7	276	30.6	30.5	-3.0	—	—	—	—			
7	288	8.5	8.1	-2.7	289	9.1	8.6	-2.9	294	14.6	13.3	-6.0	289	21.1	19.9	-7.0	277	32.2	31.9	-4.1	274	34.0	33.9	-2.5	287	19.0	18.2	-5.6			
8	281	9.3	9.1	-1.7	286	9.9	9.5	-2.7	290	16.2	15.2	-5.5	289	21.6	20.5	-6.9	291	32.7	30.5	-11.9	280	38.3	37.7	-6.9	—	—	—	—			
9	282	8.9	8.7	-1.8	287	8.6	8.2	-2.5	293	14.4	13.2	-5.7	288	22.1	21.0	-7.0	280	27.0	26.6	-4.5	269	35.4	35.4	0.8	—	—	—	—			
10	279	8.3	8.2	-1.3	276	7.2	7.2	-0.8	287	13.3	12.7	-3.9	284	20.6	20.0	-5.1	279	26.2	25.9	-4.0	280	34.2	33.7	-5.7	—	—	—	—			
11	273	7.2	7.2	-0.4	266	6.9	6.9	0.5	287	14.1	13.5	-4.0	290	19.9	18.7	-6.8	268	34.5	34.5	1.5	271	40.7	40.7	-1.0	—	—	—	—			
12	287	5.3	5.1	-1.6	280	6.8	6.7	-1.2	291	16.8	15.6	-6.1	288	21.0	19.9	-6.6	283	29.9	29.1	-6.7	277	43.3	43.0	-4.9	—	—	—	—			
13	281	7.5	7.4	-1.4	286	7.0	6.7	-1.9	280	14.9	14.7	-2.7	283	21.7	21.2	-4.7	287	27.8	26.6	-8.1	293	30.7	28.3	-11.9	—	—	—	—			
14	280	7.4	7.3	-1.3	285	8.8	8.5	-2.3	289	15.2	14.4	-5.0	290	20.2	18.9	-7.0	287	28.6	27.3	-8.5	260	36.4	35.8	6.3	—	—	—	—			
15	284	8.9	8.6	-2.1	281	10.4	10.2	-1.9	292	16.2	15.0	-6.2	284	20.9	20.3	-4.9	289	33.5	31.6	-11.1	287	38.0	36.3	-11.2	—	—	—	—			
16	281	11.8	11.6	-2.2	286	11.4	10.9	-3.2	289	15.9	15.0	-5.2	293	19.2	17.7	-7.4	278	32.9	32.6	-4.3	272	32.6	32.6	-1.2	289	14.0	13.2	-4.6			
17	278	10.7	10.6	-1.5	279	9.8	9.7	-1.6	287	14.0	13.4	-4.2	292	21.2	19.7	-7.8	280	29.7	29.2	-5.2	279	41.6	41.1	-6.4	—	—	—	—			
18	290	8.0	7.5	-2.7	284	9.6	9.3	-2.3	290	15.9	14.9	-5.5	286	18.8	18.1	-5.1	283	30.3	29.5	-6.7	278	36.9	36.5	-5.3	—	—	—	—			
19	280	6.7	6.6	-1.2	284	8.6	8.3	-2.1	293	17.3	15.9	-6.8	289	18.4	17.4	-5.9	282	34.1	33.4	-7.1	268	52.5	52.5	1.6	—	—	—	—			
20	282	10.0	9.8	-2.1	286	11.0	10.6	-3.1	289	18.5	17.5	-6.1	284	21.3	20.7	-5.0	286	33.5	32.2	-9.1	285	40.0	38.6	-10.4	—	—	—	—			
21	279	9.4	9.3	-1.5	282	11.3	11.0	-2.4	286	18.7	18.0	-5.2	290	21.1	19.9	-7.1	284	33.8	32.8	-8.3	284	32.3	31.3	-7.8	—	—	—	—			
22	290	7.1	6.7	-2.4	290	9.6	9.0	-3.2	280	14.4	14.2	-2.6	279	22.1	21.8	-3.6	278	29.1	28.8	-4.0	269	41.3	41.3	0.9	278	31.0	30.7	-4.3			
23	277	7.7	7.6	-1.0	286	10.0	9.6	-2.7	291	16.1	15.0	-5.9	287	24.5	23.5	-7.1	286	39.7	38.1	-11.1	267	18.0	18.0	0.9	—	—	—	—			
24	293	8.2	7.6	-3.2	287	8.8	8.4	-2.5	283	13.8	13.4	-3.2	280	22.2	21.9	-3.9	281	37.0	36.3	-7.2	276	36.0	35.8	-3.8	272	43.0	43.0	-1.5			
25	284	7.0	6.8	-1.7	288	8.1	7.7	-2.5	287	13.8	13.2	-4.1	280	18.4	18.1	-3.1	270	31.5	31.5	0.1	268	41.0	41.0	1.2	—	—	—	—			
26	287	8.4	8.1	-2.4	287	9.0	8.6	-2.7	279	10.6	10.5	-1.6	282	16.9	16.5	-3.6	285	32.0	30.9	-8.4	260	35.8	35.3	6.2	—	—	—	—			
27	286	5.8	5.6	-1.6	268	5.1	5.1	0.2	282	11.0	10.8	-2.2	294	20.3	18.5	-8.3	293	27.1	25.0	-10.5	286	26.9	25.9	-7.3	276	4.8	4.8	-0.5			
28	297	8.3	7.4	-3.8	283	5.8	5.7	-1.3	292	12.6	11.7	-4.8	293	16.8	15.5	-6.5	289	31.2	29.5	-10.3	294	35.5	32.5	-14.2	—	—	—	—			
29	311	2.8	2.1	-1.8	290	5.9	5.6	-2.0	294	13.7	12.5	-5.5	295	18.2	16.5	-7.7	277	27.6	27.4	-3.5	280	32.8	32.3	-5.6	—	—	—	—			
30	321	2.7	1.7	-2.1	289	5.8	5.5	-1.9	290	12.3	11.6	-4.2	292	18.3	17.0	-6.8	290	27.9	26.2	-9.5	303	32.8	27.5	-17.8	—	—	—	—			
31	305	3.9	3.2	-2.2	284	6.3	6.1	-1.5	289	11.1	10.5	-3.6	288	18.8	17.9	-5.8	288	29.8	28.4	-9.1	292	36.1	33.5	-13.4	306	36.9	29.9	-21.7			

Daily Normals of Upper Air Winds (1971-2000)

PATNA

APRIL

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	295	8.1	7.4	-3.4	285	11.0	10.6	-2.9	286	15.2	14.6	-4.1	290	20.6	19.4	-7.0	281	37.2	36.6	-6.9	277	35.4	35.2	-4.2	278	31.0	30.7	-4.3			
2	306	5.6	4.5	-3.3	284	8.1	7.9	-1.9	290	13.4	12.6	-4.5	279	18.8	18.6	-3.0	266	31.1	31.0	2.4	288	42.4	40.4	-13.0	313	31.0	22.7	-21.1			
3	299	6.3	5.5	-3.0	288	9.5	9.0	-3.0	287	13.7	13.1	-3.9	282	20.0	19.6	-4.0	271	34.9	34.9	-0.7	265	41.0	40.8	3.6	—	—	—	—			
4	303	7.1	5.9	-3.9	285	8.0	7.7	-2.1	289	15.4	14.5	-5.1	291	19.6	18.3	-7.0	267	32.8	32.7	1.9	257	40.5	39.4	9.2	—	—	—	—			
5	288	6.1	5.8	-1.9	285	8.9	8.6	-2.3	285	11.6	11.2	-2.9	288	17.4	16.5	-5.5	275	29.3	29.2	-2.8	273	38.5	38.4	-2.3	275	29.0	28.9	-2.5			
6	295	6.3	5.7	-2.6	284	8.9	8.7	-2.1	289	9.8	9.3	-3.2	295	15.9	14.4	-6.7	298	28.0	24.6	-13.3	288	35.3	33.6	-10.8	—	—	—	—			
7	288	3.5	3.3	-1.1	280	7.2	7.1	-1.2	293	13.8	12.7	-5.3	299	15.7	13.8	-7.5	292	20.6	19.1	-7.6	276	33.6	33.4	-3.7	—	—	—	—			
8	301	4.1	3.5	-2.1	292	7.1	6.6	-2.6	288	14.8	14.1	-4.6	286	15.6	15.0	-4.3	286	31.1	29.9	-8.5	263	39.4	39.1	4.8	—	—	—	—			
9	292	5.1	4.7	-1.9	289	7.5	7.1	-2.4	280	14.7	14.5	-2.5	285	18.3	17.7	-4.8	274	31.0	30.9	-2.2	276	44.7	44.5	-4.5	—	—	—	—			
10	286	3.2	3.1	-0.9	283	9.0	8.8	-2.0	290	14.5	13.7	-4.9	289	18.8	17.7	-6.2	269	29.2	29.2	0.3	268	38.2	38.2	1.3	—	—	—	—			
11	303	6.6	5.5	-3.6	285	10.5	10.1	-2.7	291	15.0	14.0	-5.3	286	18.2	17.5	-5.0	267	29.0	29.0	1.7	259	36.8	36.1	7.3	252	15.0	14.3	4.6			
12	300	6.1	5.3	-3.1	286	9.1	8.7	-2.5	295	16.0	14.5	-6.7	289	18.3	17.3	-5.9	277	30.0	29.8	-3.5	258	28.8	28.2	6.0	232	13.0	10.2	8.0			
13	305	5.7	4.7	-3.3	289	9.7	9.2	-3.1	280	14.3	14.1	-2.6	284	21.2	20.6	-5.0	265	32.9	32.8	2.6	216	66.0	38.8	53.4	—	—	—	—			
14	297	6.2	5.5	-2.8	284	9.3	9.0	-2.3	283	14.1	13.7	-3.2	284	18.8	18.2	-4.6	277	24.8	24.6	-2.9	251	31.3	29.6	10.3	—	—	—	—			
15	291	5.7	5.3	-2.0	285	9.6	9.3	-2.5	287	11.5	11.0	-3.3	282	15.0	14.7	-3.2	276	27.5	27.3	-3.1	—	—	—	—	—	—	—	—			
16	322	6.2	3.8	-4.9	293	8.3	7.7	-3.2	275	11.4	11.4	-1.0	285	18.6	18.0	-4.7	270	36.6	36.6	-0.2	261	46.8	46.2	7.6	230	24.0	18.4	15.4			
17	290	5.9	5.6	-2.0	283	5.9	5.8	-1.3	275	10.5	10.5	-0.9	282	17.3	16.9	-3.7	289	27.2	25.7	-9.0	289	39.4	37.3	-12.8	—	—	—	—			
18	298	6.2	5.5	-2.9	285	6.3	6.1	-1.6	286	11.7	11.2	-3.3	287	16.7	15.9	-5.0	283	25.4	24.8	-5.5	274	33.7	33.6	-2.2	—	—	—	—			
19	298	8.9	7.8	-4.2	288	9.6	9.1	-2.9	287	13.4	12.8	-3.8	290	15.9	15.0	-5.4	272	36.0	36.0	-1.3	263	36.9	36.7	4.2	—	—	—	—			
20	306	4.8	3.9	-2.8	287	7.7	7.4	-2.2	280	11.8	11.6	-2.0	294	15.1	13.8	-6.1	287	25.4	24.3	-7.5	271	23.3	23.3	-0.3	288	9.8	9.3	-3.0			
21	327	2.4	1.3	-2.0	272	5.1	5.1	-0.2	289	11.0	10.4	-3.5	287	13.4	12.8	-3.8	269	21.8	21.8	0.5	272	16.0	16.0	-0.5	347	13.9	3.1	-13.6			
22	318	3.9	2.6	-2.9	289	7.2	6.8	-2.4	289	13.5	12.8	-4.4	279	11.4	11.3	-1.7	268	16.9	16.9	0.5	280	22.8	22.4	-4.0	—	—	—	—			
23	302	6.4	5.4	-3.4	278	8.7	8.6	-1.2	289	13.3	12.6	-4.4	280	16.1	15.9	-2.8	275	27.4	27.3	-2.5	267	27.7	27.7	1.4	305	6.0	4.9	-3.4			
24	300	4.2	3.6	-2.1	275	7.0	7.0	-0.6	281	12.8	12.6	-2.4	290	13.6	12.8	-4.7	278	21.7	21.5	-3.0	296	22.9	20.6	-9.9	—	—	—	—			
25	341	3.1	1.0	-2.9	287	5.9	5.7	-1.7	287	9.8	9.4	-2.9	290	14.5	13.6	-5.0	274	20.5	20.5	-1.3	272	25.3	25.3	-0.7	—	—	—	—			
26	304	2.9	2.4	-1.6	274	5.8	5.8	-0.4	283	11.6	11.3	-2.6	293	15.5	14.2	-6.1	282	22.3	21.8	-4.8	248	36.9	34.2	13.9	312	18.0	13.4	-12.0			
27	334	3.0	1.3	-2.7	285	5.9	5.7	-1.5	283	12.2	11.9	-2.8	292	16.5	15.3	-6.3	270	17.1	17.1	-0.1	302	21.2	18.0	-11.2	282	10.6	10.4	-2.2			
28	340	3.3	1.1	-3.1	276	5.4	5.4	-0.6	291	12.6	11.7	-4.6	294	12.6	11.5	-5.1	274	19.4	19.4	-1.2	276	14.0	13.9	-1.5	312	11.4	8.5	-7.6			
29	315	4.8	3.4	-3.4	286	5.8	5.6	-1.6	288	11.5	10.9	-3.6	295	13.1	11.8	-5.6	295	18.4	16.6	-7.9	277	21.1	21.0	-2.4	—	—	—	—			
30	300	3.0	2.6	-1.5	276	4.5	4.5	-0.5	288	11.9	11.3	-3.7	301	15.2	13.1	-7.8	277	25.9	25.7	-3.2	259	25.5	25.0	4.8	—	—	—	—			

Daily Normals of Upper Air Winds (1971-2000)

PATNA

MAY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	304	4.0	3.3	-2.2	281	5.7	5.6	-1.1	289	10.8	10.2	-3.6	290	13.9	13.0	-4.8	276	28.2	28.0	-3.1	263	25.4	25.2	3.1	223	12.0	8.2	8.8			
2	344	1.5	0.4	-1.4	288	7.5	7.1	-2.3	289	12.7	12.0	-4.2	284	15.1	14.6	-3.7	270	22.1	22.1	0.0	265	23.2	23.1	1.9	—	—	—	—			
3	347	1.7	0.4	-1.7	298	6.4	5.6	-3.0	285	12.2	11.8	-3.2	289	13.3	12.6	-4.3	259	22.3	21.9	4.4	263	24.6	24.4	3.1	—	—	—	—			
4	336	1.0	0.4	-0.9	293	6.0	5.5	-2.3	284	10.6	10.3	-2.5	274	16.0	16.0	-1.0	264	23.6	23.5	2.4	236	32.4	27.0	17.9	280	44.0	43.3	-7.6			
5	298	1.7	1.5	-0.8	285	6.0	5.8	-1.6	289	11.4	10.8	-3.8	294	12.8	11.7	-5.1	264	24.2	24.1	2.5	240	26.2	22.8	13.0	331	9.9	4.8	-8.7			
6	286	5.4	5.2	-1.5	276	8.0	7.9	-0.9	287	12.6	12.1	-3.6	298	13.4	11.9	-6.2	264	20.7	20.6	2.0	260	21.6	21.3	3.7	—	—	—	—			
7	309	2.6	2.0	-1.6	257	5.9	5.8	1.3	272	11.4	11.4	-0.3	288	12.5	11.9	-3.9	264	21.1	21.0	2.3	272	27.9	27.9	-1.1	50	9.0	-6.9	-5.8			
8	306	4.3	3.5	-2.5	287	6.1	5.8	-1.8	286	10.3	9.9	-2.9	293	12.7	11.7	-5.0	276	25.4	25.2	-2.8	277	25.7	25.5	-3.0	71	13.0	-12.3	-4.2			
9	306	2.6	2.1	-1.5	293	6.9	6.3	-2.7	284	12.3	12.0	-2.9	288	14.6	13.9	-4.4	263	31.3	31.1	3.7	259	27.1	26.6	5.4	2	10.8	-0.3	-10.8			
10	306	3.2	2.6	-1.9	291	4.9	4.6	-1.8	283	9.8	9.5	-2.2	284	14.7	14.3	-3.6	263	24.6	24.4	3.0	266	30.5	30.4	2.2	259	9.1	8.9	1.8			
11	319	5.7	3.7	-4.3	288	6.1	5.8	-1.9	285	11.0	10.6	-2.8	290	12.6	11.8	-4.3	273	23.1	23.1	-1.2	262	24.7	24.4	3.6	270	5.0	5.0	0.0			
12	324	2.4	1.4	-1.9	275	4.3	4.3	-0.4	285	10.4	10.0	-2.7	297	12.7	11.3	-5.8	280	21.6	21.3	-3.8	277	18.3	18.2	-2.1	—	—	—	—			
13	353	2.6	0.3	-2.6	290	3.5	3.3	-1.2	293	9.9	9.1	-3.9	291	13.1	12.2	-4.7	268	18.0	18.0	0.7	243	11.0	9.8	4.9	51	15.0	-11.7	-9.4			
14	332	3.2	1.5	-2.8	282	2.9	2.8	-0.6	286	10.4	10.0	-2.9	287	12.8	12.2	-3.8	272	18.4	18.4	-0.7	271	18.9	18.9	-0.3	276	13.2	13.1	-1.3			
15	360	0.9	0.0	-0.9	275	3.5	3.5	-0.3	287	11.0	10.5	-3.2	287	13.7	13.1	-4.0	271	19.3	19.3	-0.5	279	18.1	17.9	-2.9	92	18.6	-18.6	0.8			
16	343	2.7	0.8	-2.6	296	4.3	3.9	-1.9	297	11.8	10.5	-5.3	291	10.7	10.0	-3.8	269	16.4	16.4	0.3	264	21.1	21.0	2.1	31	3.1	-1.6	-2.7			
17	330	2.8	1.4	-2.4	295	3.8	3.4	-1.6	295	10.4	9.4	-4.4	288	11.6	11.0	-3.6	270	19.3	19.3	0.1	277	12.2	12.1	-1.5	215	6.0	3.4	4.9			
18	321	2.1	1.3	-1.6	284	2.1	2.0	-0.5	291	9.0	8.4	-3.2	301	10.7	9.2	-5.5	265	17.7	17.6	1.4	268	12.9	12.9	0.4	307	4.9	3.9	-2.9			
19	331	1.8	0.9	-1.6	290	3.7	3.5	-1.3	305	9.7	8.0	-5.5	305	12.5	10.2	-7.2	286	14.9	14.4	-4.0	238	11.1	9.4	5.9	209	2.5	1.2	2.2			
20	357	1.8	0.1	-1.8	284	2.9	2.8	-0.7	298	7.8	6.9	-3.6	296	11.4	10.3	-5.0	267	13.1	13.1	0.7	265	12.6	12.6	1.0	261	6.3	6.2	1.0			
21	340	2.3	0.8	-2.2	289	3.4	3.2	-1.1	290	8.6	8.1	-2.9	291	12.8	11.9	-4.6	272	14.1	14.1	-0.6	262	14.6	14.5	2.0	255	3.1	3.0	0.8			
22	2	2.6	-0.1	-2.6	284	2.9	2.8	-0.7	297	10.1	9.0	-4.5	296	10.6	9.6	-4.6	274	12.7	12.7	-0.8	240	12.9	11.2	6.5	198	3.6	1.1	3.4			
23	351	1.8	0.3	-1.8	300	5.3	4.6	-2.7	290	9.2	8.7	-3.1	300	10.3	9.0	-5.1	273	9.3	9.3	-0.5	245	13.4	12.2	5.6	149	3.1	-1.6	2.7			
24	22	0.5	-0.2	-0.5	285	3.1	3.0	-0.8	292	8.7	8.0	-3.3	291	9.1	8.5	-3.3	267	11.3	11.3	0.6	255	14.3	13.8	3.8	172	3.7	-0.5	3.7			
25	333	0.7	0.3	-0.6	293	5.6	5.1	-2.2	295	11.9	10.7	-5.1	302	9.7	8.2	-5.1	265	10.9	10.9	1.0	270	10.1	10.1	0.0	202	5.5	2.1	5.1			
26	15	1.6	-0.4	-1.5	283	2.6	2.5	-0.6	294	9.8	8.9	-4.0	301	11.6	9.9	-6.0	269	13.6	13.6	0.2	270	11.2	11.2	0.0	204	7.1	2.9	6.5			
27	321	1.9	1.2	-1.5	297	2.9	2.6	-1.3	300	9.9	8.6	-5.0	307	11.7	9.3	-7.1	275	14.6	14.6	-1.2	248	16.3	15.1	6.1	173	10.3	-1.3	10.2			
28	326	3.4	1.9	-2.8	291	5.0	4.7	-1.8	293	11.9	10.9	-4.7	301	11.9	10.2	-6.2	267	13.1	13.1	0.7	255	13.2	12.8	3.4	195	6.4	1.7	6.2			
29	338	1.1	0.4	-1.0	294	5.4	4.9	-2.2	292	13.4	12.4	-5.1	298	14.2	12.6	-6.6	266	17.9	17.8	1.4	257	13.6	13.2	3.1	271	8.3	8.3	-0.1			
30	305	2.9	2.4	-1.7	297	4.4	3.9	-2.0	289	12.7	12.0	-4.2	295	13.7	12.4	-5.9	274	15.2	15.2	-1.1	255	15.5	14.9	4.1	94	9.0	-9.0	0.6			
31	307	3.1	2.5	-1.9	284	4.4	4.3	-1.1	289	10.5	9.9	-3.4	291	13.4	12.5	-4.9	268	16.8	16.8	0.6	241	14.5	12.7	6.9	228	2.7	2.0	1.8			

Daily Normals of Upper Air Winds (1971-2000)

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PATNA

JUNE

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	320	3.1	2.0	-2.4	284	6.2	6.0	-1.5	290	10.6	9.9	-3.7	278	10.2	10.1	-1.5	257	10.9	10.6	2.4	248	10.5	9.7	3.9	150	2.4	-1.2	2.1			
2	298	2.4	2.1	-1.1	281	5.3	5.2	-1.0	287	10.3	9.9	-3.0	279	12.4	12.2	-2.0	259	15.6	15.3	3.1	269	17.1	17.1	0.2	255	6.5	6.3	1.7			
3	45	1.6	-1.1	-1.1	286	3.6	3.5	-1.0	292	11.2	10.4	-4.1	285	9.4	9.1	-2.5	255	11.3	10.9	3.0	233	11.8	9.4	7.2	167	4.5	-1.0	4.4			
4	32	2.2	-1.2	-1.9	292	3.8	3.5	-1.4	291	10.0	9.3	-3.6	295	10.1	9.2	-4.2	252	15.8	15.1	4.8	236	14.8	12.3	8.3	114	2.0	-1.8	0.8			
5	19	2.1	-0.7	-2.0	294	2.4	2.2	-1.0	287	8.7	8.3	-2.6	291	12.5	11.7	-4.4	250	14.0	13.2	4.7	245	11.6	10.5	4.9	215	7.2	4.1	5.9			
6	312	3.0	2.2	-2.0	302	6.5	5.5	-3.5	294	9.4	8.6	-3.9	274	11.4	11.4	-0.8	249	12.9	12.1	4.6	240	14.6	12.6	7.3	142	11.0	-6.8	8.7			
7	54	1.9	-1.5	-1.1	275	3.4	3.4	-0.3	292	10.0	9.3	-3.8	295	8.9	8.1	-3.7	262	7.1	7.0	1.0	256	4.6	4.5	1.1	129	5.1	-4.0	3.2			
8	321	1.3	0.8	-1.0	272	3.2	3.2	-0.1	291	7.4	6.9	-2.7	286	5.0	4.8	-1.4	279	7.4	7.3	-1.1	249	5.6	5.2	2.0	45	2.0	-1.4	-1.4			
9	17	1.0	-0.3	-1.0	273	2.2	2.2	-0.1	285	5.6	5.4	-1.4	307	4.9	3.9	-2.9	281	4.9	4.8	-0.9	229	3.7	2.8	2.4	63	4.2	-3.7	-1.9			
10	36	1.9	-1.1	-1.5	297	1.8	1.6	-0.8	306	5.9	4.8	-3.5	320	3.9	2.5	-3.0	312	3.0	2.2	-2.0	10	6.1	-1.1	-6.0	88	6.0	-6.0	-0.2			
11	67	3.6	-3.3	-1.4	236	1.1	0.9	0.6	294	5.5	5.0	-2.2	313	4.7	3.4	-3.2	294	2.0	1.8	-0.8	218	2.8	1.7	2.2	134	6.3	-4.5	4.4			
12	79	2.1	-2.1	-0.4	88	2.4	-2.4	-0.1	314	3.9	2.8	-2.7	292	3.8	3.5	-1.4	288	2.8	2.7	-0.9	239	3.3	2.8	1.7	106	5.0	-4.8	1.4			
13	90	4.1	-4.1	0.0	127	1.5	-1.2	0.9	306	3.6	2.9	-2.1	313	4.1	3.0	-2.8	252	2.0	1.9	0.6	194	1.6	0.4	1.6	140	8.9	-5.7	6.9			
14	78	2.9	-2.8	-0.6	98	2.1	-2.1	0.3	283	2.8	2.7	-0.6	321	4.9	3.1	-3.8	312	2.7	2.0	-1.8	196	0.7	0.2	0.7	128	11.3	-8.9	6.9			
15	90	4.6	-4.6	0.0	93	2.2	-2.2	0.1	323	2.5	1.5	-2.0	312	2.7	2.0	-1.8	264	3.1	3.1	0.3	202	2.2	0.8	2.0	104	8.1	-7.9	1.9			
16	99	4.3	-4.2	0.7	90	0.5	-0.5	0.0	315	3.3	2.3	-2.3	294	2.0	1.8	-0.8	76	0.8	-0.8	-0.2	121	3.1	-2.7	1.6	129	16.0	-12.4	10.1			
17	89	5.4	-5.4	-0.1	106	1.8	-1.7	0.5	272	2.5	2.5	-0.1	301	4.4	3.8	-2.3	290	6.3	5.9	-2.1	188	8.0	1.1	7.9	193	5.0	1.1	4.9			
18	107	6.6	-6.3	1.9	123	2.4	-2.0	1.3	264	0.9	0.9	0.1	5	1.2	-0.1	-1.2	163	1.7	-0.5	1.6	139	4.8	-3.1	3.6	91	8.4	-8.4	0.1			
19	105	4.8	-4.6	1.2	117	2.2	-2.0	1.0	324	1.4	0.8	-1.1	45	0.6	-0.4	-0.4	180	3.5	0.0	3.5	129	2.8	-2.2	1.8	205	4.0	1.7	3.6			
20	90	3.7	-3.7	0.0	108	2.3	-2.2	0.7	4	1.3	-0.1	-1.3	90	2.7	-2.7	0.0	81	1.2	-1.2	-0.2	124	4.0	-3.3	2.2	107	9.1	-8.7	2.7			
21	64	2.8	-2.5	-1.2	80	2.7	-2.7	-0.5	22	1.1	-0.4	-1.0	64	3.7	-3.3	-1.6	97	1.7	-1.7	0.2	110	4.9	-4.6	1.7	116	11.4	-10.2	5.0			
22	87	6.0	-6.0	-0.3	103	3.1	-3.0	0.7	323	1.0	0.6	-0.8	71	1.8	-1.7	-0.6	117	3.0	-2.7	1.4	120	5.1	-4.4	2.5	98	11.6	-11.5	1.6			
23	93	3.9	-3.9	0.2	60	1.6	-1.4	-0.8	18	2.3	-0.7	-2.2	31	2.7	-1.4	-2.3	90	3.6	-3.6	0.0	106	6.3	-6.1	1.7	98	13.9	-13.8	2.0			
24	347	0.9	0.2	-0.9	287	1.0	1.0	-0.3	321	3.2	2.0	-2.5	312	3.0	2.2	-2.0	87	4.1	-4.1	-0.2	118	7.6	-6.7	3.5	100	12.3	-12.1	2.1			
25	90	0.9	-0.9	0.0	256	0.4	0.4	0.1	303	3.3	2.8	-1.8	348	2.5	0.5	-2.4	79	3.7	-3.6	-0.7	125	8.7	-7.1	5.0	111	14.0	-13.1	5.0			
26	100	4.7	-4.6	0.8	112	3.1	-2.9	1.2	331	1.0	0.5	-0.9	45	1.4	-1.0	-1.0	119	5.0	-4.4	2.4	111	8.5	-7.9	3.1	81	12.6	-12.5	-1.9			
27	85	4.7	-4.7	-0.4	130	3.0	-2.3	1.9	96	1.9	-1.9	0.2	113	3.3	-3.0	1.3	137	4.4	-3.0	3.2	119	6.8	-5.9	3.3	67	13.3	-12.2	-5.2			
28	93	7.1	-7.1	0.4	102	5.4	-5.3	1.1	81	3.8	-3.8	-0.6	315	0.3	0.2	-0.2	122	2.5	-2.1	1.3	124	6.3	-5.2	3.5	113	16.9	-15.5	6.7			
29	88	2.5	-2.5	-0.1	157	1.5	-0.6	1.4	242	1.9	1.7	0.9	298	2.4	2.1	-1.1	138	3.0	-2.0	2.2	123	6.7	-5.6	3.7	81	14.6	-14.4	-2.3			
30	75	1.6	-1.5	-0.4	291	1.9	1.8	-0.7	306	3.4	2.8	-2.0	270	2.5	2.5	0.0	90	0.8	-0.8	0.0	109	6.5	-6.2	2.1	79	17.4	-17.1	-3.4			

Daily Normals of Upper Air Winds (1971-2000)

PATNA

JULY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	225	0.6	0.4	0.4	281	3.1	3.0	-0.6	300	3.0	2.6	-1.5	317	3.3	2.2	-2.4	50	1.6	-1.2	-1.0	119	5.8	-5.1	2.8	85	12.4	-12.4	-1.1			
2	126	1.7	-1.4	1.0	72	0.3	-0.3	-0.1	304	3.7	3.1	-2.1	307	3.1	2.5	-1.9	92	2.4	-2.4	0.1	91	4.5	-4.5	0.1	101	15.7	-15.4	2.9			
3	94	2.8	-2.8	0.2	360	0.9	0.0	-0.9	340	3.3	1.1	-3.1	32	0.9	-0.5	-0.8	248	0.5	0.5	0.2	117	6.0	-5.4	2.7	94	13.0	-13.0	0.8			
4	48	1.2	-0.9	-0.8	310	0.8	0.6	-0.5	314	4.0	2.9	-2.8	353	0.8	0.1	-0.8	99	3.6	-3.6	0.6	111	9.0	-8.4	3.2	103	18.9	-18.4	4.1			
5	277	3.3	3.3	-0.4	263	2.4	2.4	0.3	294	4.2	3.8	-1.7	321	2.1	1.3	-1.6	105	2.8	-2.7	0.7	103	9.1	-8.9	2.0	97	16.6	-16.5	2.0			
6	172	0.7	-0.1	0.7	278	2.7	2.7	-0.4	297	4.2	3.8	-1.9	90	0.4	-0.4	0.0	113	4.8	-4.4	1.9	102	8.6	-8.4	1.8	99	16.8	-16.6	2.7			
7	118	2.6	-2.3	1.2	223	1.6	1.1	1.2	273	2.1	2.1	-0.1	168	1.4	-0.3	1.4	99	4.4	-4.3	0.7	92	8.3	-8.3	0.3	97	20.2	-20.0	2.5			
8	90	0.9	-0.9	0.0	272	3.1	3.1	-0.1	283	3.7	3.6	-0.8	203	1.5	0.6	1.4	81	4.6	-4.5	-0.7	80	8.8	-8.7	-1.5	83	18.9	-18.8	-2.3			
9	30	0.8	-0.4	-0.7	315	2.8	2.0	-2.0	300	4.4	3.8	-2.2	360	0.8	0.0	-0.8	67	3.6	-3.3	-1.4	115	8.6	-7.8	3.6	98	21.1	-20.9	3.1			
10	131	3.2	-2.4	2.1	212	1.3	0.7	1.1	288	0.3	0.3	-0.1	92	3.4	-3.4	0.1	81	6.6	-6.5	-1.0	64	6.4	-5.8	-2.8	72	17.5	-16.7	-5.3			
11	112	5.3	-4.9	2.0	159	1.4	-0.5	1.3	118	1.5	-1.3	0.7	83	1.7	-1.7	-0.2	123	5.0	-4.2	2.7	113	5.7	-5.3	2.2	87	18.1	-18.1	-0.9			
12	119	5.7	-5.0	2.8	137	5.6	-3.8	4.1	130	4.7	-3.6	3.0	137	4.8	-3.3	3.5	105	5.1	-4.9	1.3	110	5.3	-5.0	1.8	89	22.2	-22.2	-0.3			
13	93	6.4	-6.4	0.3	118	4.9	-4.3	2.3	121	3.9	-3.3	2.0	117	3.7	-3.3	1.7	106	5.9	-5.7	1.6	112	10.3	-9.6	3.8	92	17.3	-17.3	0.6			
14	99	3.9	-3.9	0.6	121	5.1	-4.4	2.6	127	4.4	-3.5	2.6	97	1.6	-1.6	0.2	96	3.6	-3.6	0.4	116	7.6	-6.9	3.3	91	22.1	-22.1	0.2			
15	107	4.8	-4.6	1.4	138	2.7	-1.8	2.0	130	0.8	-0.6	0.5	63	0.9	-0.8	-0.4	105	4.3	-4.2	1.1	113	7.5	-6.9	2.9	118	12.9	-11.4	6.1			
16	103	5.3	-5.2	1.2	132	4.6	-3.4	3.1	125	3.3	-2.7	1.9	87	1.8	-1.8	-0.1	89	6.7	-6.7	-0.1	108	11.8	-11.2	3.6	95	18.3	-18.2	1.6			
17	107	5.8	-5.5	1.7	130	5.1	-3.9	3.3	138	3.1	-2.1	2.3	99	3.2	-3.2	0.5	91	6.1	-6.1	0.1	86	10.4	-10.4	-0.8	102	20.4	-19.9	4.4			
18	106	6.9	-6.6	1.9	122	6.1	-5.2	3.2	121	4.8	-4.1	2.5	104	5.8	-5.6	1.4	83	6.3	-6.2	-0.8	76	12.5	-12.1	-3.0	91	21.3	-21.3	0.5			
19	111	4.8	-4.5	1.7	118	4.2	-3.7	2.0	102	4.2	-4.1	0.9	111	2.6	-2.4	0.9	79	8.2	-8.0	-1.6	90	16.8	-16.8	-0.1	90	23.5	-23.5	-0.2			
20	102	6.1	-6.0	1.3	110	5.9	-5.6	2.0	119	6.2	-5.4	3.0	117	4.2	-3.8	1.9	95	7.3	-7.3	0.6	104	12.6	-12.2	3.0	101	19.2	-18.9	3.6			
21	100	4.5	-4.4	0.8	115	5.6	-5.1	2.4	104	6.4	-6.2	1.5	100	4.1	-4.0	0.7	88	8.1	-8.1	-0.3	80	11.9	-11.7	-2.1	99	16.0	-15.8	2.6			
22	95	3.7	-3.7	0.3	110	5.8	-5.4	2.0	107	4.8	-4.6	1.4	95	5.3	-5.3	0.5	102	10.3	-10.1	2.1	97	11.8	-11.7	1.5	94	18.9	-18.8	1.4			
23	123	2.4	-2.0	1.3	113	5.1	-4.7	2.0	120	5.8	-5.0	2.9	125	4.0	-3.3	2.3	93	8.3	-8.3	0.4	80	12.3	-12.1	-2.2	95	22.1	-22.0	1.9			
24	83	1.7	-1.7	-0.2	131	2.9	-2.2	1.9	142	1.8	-1.1	1.4	114	3.2	-2.9	1.3	102	7.5	-7.3	1.5	83	14.3	-14.2	-1.8	83	24.8	-24.6	-2.9			
25	111	1.4	-1.3	0.5	140	2.3	-1.5	1.8	117	2.5	-2.2	1.1	69	3.0	-2.8	-1.1	100	9.8	-9.7	1.7	105	14.3	-13.8	3.6	97	19.8	-19.7	2.4			
26	124	2.9	-2.4	1.6	143	3.0	-1.8	2.4	139	2.0	-1.3	1.5	90	3.1	-3.1	0.0	96	6.7	-6.7	0.7	97	5.8	-5.8	0.7	86	21.6	-21.5	-1.5			
27	108	5.4	-5.1	1.7	121	3.9	-3.3	2.0	133	4.4	-3.2	3.0	91	5.3	-5.3	0.1	101	7.2	-7.1	1.4	90	13.2	-13.2	-0.1	88	19.2	-19.2	-0.7			
28	97	6.4	-6.4	0.8	113	4.8	-4.4	1.9	124	4.2	-3.5	2.4	96	6.2	-6.2	0.7	90	11.9	-11.9	0.0	88	13.1	-13.1	-0.5	77	21.1	-20.5	-4.9			
29	110	5.8	-5.4	2.0	138	2.5	-1.7	1.9	129	2.7	-2.1	1.7	127	4.0	-3.2	2.4	75	6.9	-6.7	-1.8	93	10.8	-10.8	0.5	88	21.2	-21.2	-0.6			
30	86	3.2	-3.2	-0.2	193	2.2	0.5	2.1	162	1.9	-0.6	1.8	95	2.2	-2.2	0.2	66	7.2	-6.6	-2.9	87	13.7	-13.7	-0.6	93	20.4	-20.4	1.2			
31	86	4.1	-4.1	-0.3	114	1.2	-1.1	0.5	112	0.5	-0.5	0.2	100	4.6	-4.5	0.8	95	6.1	-6.1	0.5	68	10.5	-9.7	-3.9	80	18.2	-17.9	-3.1			

Daily Normals of Upper Air Winds (1971-2000)

320

PATNA

AUGUST

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	102	4.7	-4.6	1.0	131	0.9	-0.7	0.6	281	0.5	0.5	-0.1	38	3.6	-2.2	-2.8	74	5.2	-5.0	-1.4	68	7.0	-6.5	-2.6	85	20.2	-20.1	-1.9			
2	216	0.9	0.5	0.7	126	2.7	-2.2	1.6	114	3.2	-2.9	1.3	99	4.0	-4.0	0.6	86	7.3	-7.3	-0.5	70	9.2	-8.6	-3.2	102	16.7	-16.3	3.4			
3	113	5.0	-4.6	2.0	111	6.0	-5.6	2.2	120	5.4	-4.7	2.7	108	4.0	-3.8	1.2	97	6.1	-6.1	0.7	90	10.4	-10.4	0.0	94	18.0	-17.9	1.4			
4	135	1.4	-1.0	1.0	167	2.7	-0.6	2.6	155	2.9	-1.2	2.6	123	1.7	-1.4	0.9	87	8.2	-8.2	-0.4	89	9.4	-9.4	-0.2	83	18.5	-18.3	-2.4			
5	63	1.6	-1.4	-0.7	118	3.6	-3.2	1.7	104	4.2	-4.1	1.0	99	6.2	-6.1	1.0	84	8.2	-8.2	-0.8	89	8.8	-8.8	-0.2	103	21.5	-21.0	4.8			
6	127	2.1	-1.7	1.3	126	2.9	-2.3	1.7	125	3.5	-2.9	2.0	106	6.0	-5.8	1.7	93	7.7	-7.7	0.4	94	9.9	-9.9	0.7	90	18.9	-18.9	-0.1			
7	86	1.3	-1.3	-0.1	112	4.2	-3.9	1.6	113	4.9	-4.5	1.9	111	5.6	-5.2	2.0	95	9.1	-9.1	0.8	84	12.8	-12.7	-1.4	95	21.0	-20.9	1.7			
8	103	2.2	-2.1	0.5	122	3.2	-2.7	1.7	112	3.2	-3.0	1.2	127	4.1	-3.3	2.5	96	8.9	-8.8	1.0	88	12.8	-12.8	-0.5	99	21.1	-20.9	3.2			
9	106	5.2	-5.0	1.4	143	4.8	-2.9	3.8	132	4.7	-3.5	3.2	113	4.4	-4.1	1.7	86	8.6	-8.6	-0.6	87	13.3	-13.3	-0.8	94	18.9	-18.9	1.3			
10	111	5.9	-5.5	2.1	165	3.0	-0.8	2.9	170	1.7	-0.3	1.7	207	0.4	0.2	0.4	86	9.2	-9.2	-0.6	79	12.4	-12.2	-2.3	90	19.6	-19.6	0.1			
11	109	4.2	-4.0	1.4	123	2.4	-2.0	1.3	114	2.4	-2.2	1.0	112	2.2	-2.0	0.8	85	6.7	-6.7	-0.6	81	10.9	-10.8	-1.8	91	17.0	-17.0	0.4			
12	139	1.8	-1.2	1.4	163	1.7	-0.5	1.6	167	1.7	-0.4	1.7	153	0.2	-0.1	0.2	71	6.5	-6.1	-2.1	76	7.3	-7.1	-1.8	85	20.1	-20.0	-1.9			
13	279	2.0	2.0	-0.3	196	1.9	0.5	1.8	45	0.1	-0.1	-0.1	139	0.9	-0.6	0.7	78	3.8	-3.7	-0.8	117	5.6	-5.0	2.5	74	9.1	-8.7	-2.5			
14	95	1.1	-1.1	0.1	135	2.3	-1.6	1.6	135	2.0	-1.4	1.4	141	0.6	-0.4	0.5	75	3.5	-3.4	-0.9	94	8.4	-8.4	0.6	83	15.9	-15.8	-1.9			
15	99	1.8	-1.8	0.3	119	5.0	-4.4	2.4	118	3.6	-3.2	1.7	131	3.0	-2.3	2.0	92	7.5	-7.5	0.3	81	9.2	-9.1	-1.5	91	16.4	-16.4	0.4			
16	117	1.3	-1.2	0.6	144	2.4	-1.4	1.9	128	3.7	-2.9	2.3	110	2.0	-1.9	0.7	88	7.6	-7.6	-0.2	89	9.5	-9.5	-0.1	87	18.3	-18.3	-0.8			
17	101	3.1	-3.0	0.6	130	4.8	-3.7	3.1	125	5.1	-4.2	2.9	109	5.0	-4.7	1.6	88	9.1	-9.1	-0.3	91	7.0	-7.0	0.1	77	13.9	-13.6	-3.1			
18	99	5.7	-5.6	0.9	121	6.1	-5.2	3.1	123	5.9	-4.9	3.2	128	4.6	-3.6	2.8	95	8.6	-8.6	0.8	88	10.1	-10.1	-0.4	100	14.7	-14.5	2.5			
19	112	5.6	-5.2	2.1	137	5.2	-3.5	3.8	132	4.7	-3.5	3.2	108	4.9	-4.7	1.5	81	7.4	-7.3	-1.1	89	14.0	-14.0	-0.3	90	19.9	-19.9	0.1			
20	100	5.8	-5.7	1.0	110	5.4	-5.1	1.9	116	5.1	-4.6	2.2	76	3.7	-3.6	-0.9	78	6.2	-6.1	-1.3	73	11.3	-10.8	-3.4	81	16.9	-16.7	-2.7			
21	107	5.1	-4.9	1.5	116	5.8	-5.2	2.5	117	7.2	-6.4	3.3	112	4.5	-4.2	1.7	86	4.2	-4.2	-0.3	87	7.4	-7.4	-0.4	89	15.0	-15.0	-0.3			
22	102	3.9	-3.8	0.8	119	5.4	-4.7	2.6	122	5.2	-4.4	2.8	117	4.9	-4.4	2.2	97	4.0	-4.0	0.5	80	10.2	-10.1	-1.7	95	14.8	-14.7	1.3			
23	116	3.0	-2.7	1.3	151	2.9	-1.4	2.5	162	2.6	-0.8	2.5	146	1.8	-1.0	1.5	85	3.3	-3.3	-0.3	70	9.5	-8.9	-3.3	107	15.0	-14.3	4.4			
24	107	3.0	-2.9	0.9	221	1.8	1.2	1.4	235	1.6	1.3	0.9	217	0.5	0.3	0.4	73	2.7	-2.6	-0.8	70	6.7	-6.3	-2.3	81	11.9	-11.8	-1.8			
25	124	2.2	-1.8	1.2	207	1.6	0.7	1.4	194	0.8	0.2	0.8	221	0.9	0.6	0.7	122	1.5	-1.3	0.8	125	9.3	-7.6	5.3	100	15.3	-15.1	2.6			
26	109	4.3	-4.1	1.4	164	1.5	-0.4	1.4	138	1.3	-0.9	1.0	96	1.0	-1.0	0.1	142	2.3	-1.4	1.8	102	8.2	-8.0	1.7	84	14.3	-14.2	-1.4			
27	110	2.9	-2.7	1.0	114	3.0	-2.7	1.2	105	3.0	-2.9	0.8	97	5.1	-5.1	0.6	129	3.2	-2.5	2.0	109	8.0	-7.6	2.6	85	11.0	-11.0	-0.9			
28	97	4.1	-4.1	0.5	119	3.3	-2.9	1.6	114	3.0	-2.7	1.2	112	3.2	-3.0	1.2	115	3.5	-3.2	1.5	125	4.0	-3.3	2.3	107	9.1	-8.7	2.7			
29	97	5.0	-5.0	0.6	105	3.9	-3.8	1.0	127	2.5	-2.0	1.5	130	1.6	-1.2	1.0	148	3.2	-1.7	2.7	113	6.3	-5.8	2.5	108	17.1	-16.2	5.4			
30	103	5.1	-5.0	1.2	136	3.5	-2.4	2.5	124	3.0	-2.5	1.7	133	2.5	-1.8	1.7	128	5.0	-3.9	3.1	108	8.6	-8.2	2.7	112	11.3	-10.5	4.3			
31	115	7.7	-7.0	3.3	141	4.0	-2.5	3.1	137	3.8	-2.6	2.8	104	3.8	-3.7	0.9	106	4.5	-4.3	1.2	115	8.9	-8.0	3.8	98	13.3	-13.2	1.8			

Daily Normals of Upper Air Winds (1971-2000)

321

PATNA

SEPTEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	106	8.0	-7.7	2.2	132	4.8	-3.6	3.2	136	3.5	-2.4	2.5	84	3.1	-3.1	-0.3	88	3.0	-3.0	-0.1	105	3.0	-2.9	0.8	—	—	—	—			
2	102	8.1	-7.9	1.7	135	3.7	-2.6	2.6	139	2.1	-1.4	1.6	118	2.7	-2.4	1.3	185	3.4	0.3	3.4	142	4.3	-2.7	3.4	114	13.7	-12.6	5.5			
3	107	8.3	-7.9	2.4	121	4.7	-4.0	2.4	107	4.1	-3.9	1.2	129	0.6	-0.5	0.4	116	2.5	-2.3	1.1	119	6.0	-5.2	2.9	115	14.0	-12.7	5.8			
4	112	5.3	-4.9	2.0	139	3.2	-2.1	2.4	126	3.7	-3.0	2.2	114	3.7	-3.4	1.5	104	3.0	-2.9	0.7	78	2.4	-2.3	-0.5	92	11.8	-11.8	0.4			
5	130	4.2	-3.2	2.7	174	2.9	-0.3	2.9	196	2.6	0.7	2.5	124	2.9	-2.4	1.6	112	0.5	-0.5	0.2	219	0.6	0.4	0.5	77	15.5	-15.1	-3.6			
6	108	5.2	-4.9	1.6	121	2.9	-2.5	1.5	113	2.3	-2.1	0.9	45	1.1	-0.8	-0.8	86	3.2	-3.2	-0.2	63	0.2	-0.2	-0.1	72	11.6	-11.0	-3.6			
7	120	4.3	-3.7	2.1	119	2.5	-2.2	1.2	135	2.4	-1.7	1.7	208	1.9	0.9	1.7	144	1.4	-0.8	1.1	86	1.4	-1.4	-0.1	105	7.9	-7.6	2.0			
8	101	4.7	-4.6	0.9	103	3.5	-3.4	0.8	102	3.3	-3.2	0.7	117	1.8	-1.6	0.8	191	4.1	0.8	4.0	185	7.4	0.6	7.4	112	11.4	-10.6	4.2			
9	131	4.9	-3.7	3.2	126	4.1	-3.3	2.4	148	2.6	-1.4	2.2	158	0.5	-0.2	0.5	174	6.1	-0.6	6.1	178	4.6	-0.2	4.6	110	4.4	-4.1	1.5			
10	109	4.0	-3.8	1.3	125	2.9	-2.4	1.7	130	2.3	-1.8	1.5	154	2.5	-1.1	2.3	146	1.1	-0.6	0.9	176	3.1	-0.2	3.1	120	7.5	-6.5	3.8			
11	88	2.5	-2.5	-0.1	90	0.9	-0.9	0.0	87	1.8	-1.8	-0.1	180	0.2	0.0	0.2	99	3.2	-3.2	0.5	160	3.7	-1.3	3.5	93	10.8	-10.8	0.6			
12	121	1.7	-1.5	0.9	138	2.8	-1.9	2.1	121	4.3	-3.7	2.2	143	0.5	-0.3	0.4	107	1.4	-1.3	0.4	132	2.8	-2.1	1.9	99	10.3	-10.2	1.7			
13	133	2.6	-1.9	1.8	137	4.7	-3.2	3.4	137	4.9	-3.3	3.6	140	4.5	-2.9	3.4	157	1.3	-0.5	1.2	85	3.7	-3.7	-0.3	111	8.2	-7.7	2.9			
14	141	2.1	-1.3	1.6	138	4.7	-3.2	3.5	155	4.4	-1.9	4.0	134	3.6	-2.6	2.5	7	1.6	-0.2	-1.6	20	3.5	-1.2	-3.3	99	10.0	-9.9	1.6			
15	112	3.2	-3.0	1.2	149	3.5	-1.8	3.0	176	4.0	-0.3	4.0	170	2.2	-0.4	2.2	203	4.4	1.7	4.1	96	1.0	-1.0	0.1	105	9.4	-9.1	2.4			
16	93	1.9	-1.9	0.1	134	2.9	-2.1	2.0	161	2.4	-0.8	2.3	265	1.2	1.2	0.1	255	5.2	5.0	1.3	241	2.5	2.2	1.2	104	6.1	-5.9	1.5			
17	95	4.2	-4.2	0.4	122	2.6	-2.2	1.4	147	1.7	-0.9	1.4	275	3.6	3.6	-0.3	264	5.6	5.6	0.6	274	5.8	5.8	-0.4	90	6.1	-6.1	0.0			
18	97	4.7	-4.7	0.6	121	2.3	-2.0	1.2	200	1.2	0.4	1.1	246	3.0	2.7	1.2	285	4.9	4.7	-1.3	306	2.2	1.8	-1.3	76	7.6	-7.4	-1.9			
19	96	0.9	-0.9	0.1	173	0.8	-0.1	0.8	236	1.1	0.9	0.6	217	0.5	0.3	0.4	212	1.9	1.0	1.6	291	0.9	0.8	-0.3	102	7.4	-7.2	1.5			
20	302	1.5	1.3	-0.8	157	1.3	-0.5	1.2	45	0.7	-0.5	-0.5	187	0.8	0.1	0.8	262	3.5	3.5	0.5	286	5.5	5.3	-1.5	40	5.2	-3.3	-4.0			
21	74	1.5	-1.4	-0.4	85	1.2	-1.2	-0.1	93	1.9	-1.9	0.1	217	0.5	0.3	0.4	236	5.0	4.1	2.8	228	5.1	3.8	3.4	136	5.7	-4.0	4.1			
22	313	2.1	1.5	-1.4	188	1.4	0.2	1.4	149	1.2	-0.6	1.0	287	1.0	1.0	-0.3	257	7.4	7.2	1.6	223	3.3	2.2	2.4	175	2.3	-0.2	2.3			
23	77	1.8	-1.8	-0.4	108	2.2	-2.1	0.7	105	2.4	-2.3	0.6	266	3.1	3.1	0.2	261	8.1	8.0	1.2	269	6.8	6.8	0.1	134	4.3	-3.1	3.0			
24	45	0.8	-0.6	-0.6	125	2.1	-1.7	1.2	196	0.7	0.2	0.7	270	3.4	3.4	0.0	235	5.0	4.1	2.9	236	3.4	2.8	1.9	112	6.4	-5.9	2.4			
25	284	0.4	0.4	-0.1	315	0.8	0.6	-0.6	260	1.7	1.7	0.3	271	4.1	4.1	-0.1	269	4.9	4.9	0.1	202	2.2	0.8	2.0	160	3.0	-1.0	2.8			
26	52	2.3	-1.8	-1.4	351	1.2	0.2	-1.2	328	2.2	1.2	-1.9	265	5.5	5.5	0.5	247	7.9	7.3	3.1	221	7.0	4.6	5.3	147	4.2	-2.3	3.5			
27	34	1.8	-1.0	-1.5	349	4.2	0.8	-4.1	344	3.3	0.9	-3.2	290	5.2	4.9	-1.8	240	8.0	6.9	4.0	223	10.2	7.0	7.4	132	3.9	-2.9	2.6			
28	87	2.2	-2.2	-0.1	298	1.5	1.3	-0.7	304	3.6	3.0	-2.0	286	6.6	6.3	-1.8	267	9.7	9.7	0.5	224	8.7	6.0	6.3	113	3.4	-3.1	1.3			
29	203	0.8	0.3	0.7	252	0.6	0.6	0.2	276	0.9	0.9	-0.1	271	5.3	5.3	-0.1	254	10.4	10.0	2.9	248	8.7	8.1	3.3	186	1.9	0.2	1.9			
30	270	1.2	1.2	0.0	249	1.4	1.3	0.5	257	0.9	0.9	0.2	274	5.1	5.1	-0.4	255	10.7	10.4	2.7	263	10.0	9.9	1.3	119	1.3	-1.1	0.6			

Daily Normals of Upper Air Winds (1971-2000)

PATNA

OCTOBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	280	1.1	1.1	-0.2	279	1.3	1.3	-0.2	252	1.9	1.8	0.6	269	5.6	5.6	0.1	253	9.8	9.4	2.9	242	11.9	10.5	5.7	223	6.7	4.6	4.9
2	264	0.9	0.9	0.1	249	0.9	0.8	0.3	290	1.5	1.4	-0.5	271	7.9	7.9	-0.2	254	13.1	12.6	3.7	266	12.4	12.4	0.8	186	5.1	0.5	5.1
3	203	0.8	0.3	0.7	264	1.0	1.0	0.1	284	2.1	2.0	-0.5	260	6.6	6.5	1.1	262	13.6	13.5	1.8	269	12.1	12.1	0.3	257	3.7	3.6	0.8
4	132	1.3	-1.0	0.9	225	0.3	0.2	0.2	239	1.2	1.0	0.6	261	6.7	6.6	1.0	246	14.0	12.8	5.7	237	16.4	13.8	8.9	262	4.9	4.8	0.7
5	104	0.8	-0.8	0.2	153	0.4	-0.2	0.4	270	0.7	0.7	0.0	267	6.3	6.3	0.3	251	14.6	13.8	4.7	250	14.0	13.1	4.8	209	6.3	3.0	5.5
6	315	0.7	0.5	-0.5	305	1.9	1.6	-1.1	304	0.4	0.3	-0.2	274	6.1	6.1	-0.4	248	16.0	14.9	5.9	244	18.1	16.3	7.9	—	—	—	—
7	300	1.6	1.4	-0.8	298	1.5	1.3	-0.7	252	2.0	1.9	0.6	273	6.5	6.5	-0.3	247	14.7	13.6	5.7	256	17.2	16.7	4.2	236	6.4	5.3	3.6
8	331	1.3	0.6	-1.1	56	0.4	-0.3	-0.2	339	0.9	0.3	-0.8	264	6.4	6.4	0.7	250	17.3	16.2	6.0	249	18.8	17.5	6.8	203	7.3	2.9	6.7
9	309	2.2	1.7	-1.4	306	0.9	0.7	-0.5	316	3.9	2.7	-2.8	279	8.5	8.4	-1.4	263	18.8	18.6	2.4	262	16.8	16.6	2.4	258	9.3	9.1	1.9
10	260	1.7	1.7	0.3	287	1.4	1.3	-0.4	296	3.9	3.5	-1.7	285	10.2	9.9	-2.6	267	15.8	15.8	0.9	264	15.9	15.8	1.8	104	2.1	-2.0	0.5
11	252	2.0	1.9	0.6	273	1.8	1.8	-0.1	302	3.9	3.3	-2.1	276	10.0	9.9	-1.0	271	18.1	18.1	-0.4	262	18.3	18.1	2.7	260	8.2	8.1	1.5
12	283	1.8	1.8	-0.4	272	2.5	2.5	-0.1	282	4.2	4.1	-0.9	277	9.8	9.7	-1.2	258	15.9	15.5	3.4	252	17.9	17.0	5.5	220	6.5	4.2	5.0
13	298	2.7	2.4	-1.3	279	3.2	3.2	-0.5	297	4.8	4.3	-2.2	283	9.0	8.8	-2.1	253	17.8	17.0	5.2	246	18.2	16.6	7.4	231	5.0	3.9	3.2
14	282	2.4	2.3	-0.5	306	2.4	1.9	-1.4	306	3.4	2.8	-2.0	278	9.1	9.0	-1.2	254	18.3	17.6	5.1	238	24.3	20.7	12.8	232	7.0	5.5	4.3
15	279	1.2	1.2	-0.2	304	2.7	2.2	-1.5	291	4.2	3.9	-1.5	265	8.8	8.8	0.7	252	20.6	19.6	6.3	243	25.4	22.6	11.7	202	4.8	1.8	4.4
16	312	1.2	0.9	-0.8	277	2.3	2.3	-0.3	275	3.5	3.5	-0.3	269	8.2	8.2	0.1	267	13.6	13.6	0.8	259	15.9	15.6	2.9	257	8.2	8.0	1.9
17	315	1.3	0.9	-0.9	284	2.1	2.0	-0.5	280	3.6	3.5	-0.6	279	9.2	9.1	-1.5	273	16.6	16.6	-0.9	268	19.4	19.4	0.8	229	7.2	5.5	4.7
18	319	1.8	1.2	-1.4	287	3.7	3.5	-1.1	285	4.3	4.2	-1.1	284	10.9	10.6	-2.7	266	19.8	19.8	1.3	261	19.0	18.7	3.1	271	7.9	7.9	-0.2
19	313	2.5	1.8	-1.7	306	1.7	1.4	-1.0	299	2.9	2.5	-1.4	282	10.6	10.4	-2.2	264	20.8	20.7	2.0	264	23.7	23.6	2.4	285	10.2	9.8	-2.7
20	306	1.9	1.5	-1.1	315	2.8	2.0	-2.0	302	4.0	3.4	-2.1	270	11.5	11.5	0.1	263	20.2	20.0	2.5	259	24.1	23.7	4.4	267	8.3	8.3	0.4
21	297	1.1	1.0	-0.5	297	3.3	2.9	-1.5	302	3.1	2.6	-1.6	277	11.9	11.8	-1.5	258	22.0	21.5	4.5	260	23.3	23.0	4.0	263	10.0	9.9	1.2
22	299	1.8	1.6	-0.9	324	1.7	1.0	-1.4	294	2.2	2.0	-0.9	283	13.0	12.7	-2.9	264	24.7	24.6	2.6	257	23.7	23.1	5.4	265	9.7	9.7	0.9
23	333	3.0	1.4	-2.7	322	3.6	2.2	-2.8	306	4.6	3.7	-2.7	279	11.4	11.3	-1.8	273	20.4	20.4	-0.9	270	17.8	17.8	0.1	261	3.9	3.9	0.6
24	309	2.6	2.0	-1.6	311	3.0	2.3	-2.0	289	4.9	4.6	-1.6	284	12.7	12.3	-3.1	275	24.9	24.8	-2.2	267	24.0	24.0	1.4	235	4.9	4.0	2.8
25	298	2.1	1.9	-1.0	308	2.4	1.9	-1.5	288	4.4	4.2	-1.4	281	12.0	11.8	-2.4	268	23.1	23.1	0.7	269	23.5	23.5	0.3	239	10.0	8.5	5.2
26	297	2.7	2.4	-1.2	297	3.1	2.8	-1.4	308	4.1	3.2	-2.5	283	14.2	13.9	-3.1	271	25.3	25.3	-0.3	265	24.5	24.4	2.2	269	11.1	11.1	0.1
27	329	2.7	1.4	-2.3	315	2.4	1.7	-1.7	318	3.6	2.4	-2.7	277	10.2	10.1	-1.2	259	23.2	22.8	4.4	254	34.0	32.7	9.4	256	10.1	9.8	2.5
28	36	1.4	-0.8	-1.1	344	1.5	0.4	-1.4	307	3.1	2.5	-1.9	283	13.1	12.8	-2.9	264	29.6	29.4	3.3	254	30.1	28.9	8.3	262	19.0	18.8	2.6
29	53	1.0	-0.8	-0.6	324	1.4	0.8	-1.1	325	2.4	1.4	-2.0	275	11.6	11.5	-1.1	263	28.2	28.0	3.5	263	27.5	27.3	3.3	253	10.4	10.0	3.0
30	283	0.9	0.9	-0.2	338	1.1	0.4	-1.0	295	1.7	1.5	-0.7	274	11.6	11.6	-0.9	261	22.8	22.5	3.6	257	29.3	28.5	6.6	227	6.9	5.1	4.7
31	293	0.8	0.7	-0.3	180	0.1	0.0	0.1	282	3.3	3.2	-0.7	265	12.7	12.6	1.2	259	29.5	29.0	5.5	257	28.4	27.7	6.4	268	10.4	10.4	0.3

Daily Normals of Upper Air Winds (1971-2000)

323

PATNA

NOVEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	13	1.3	-0.3	-1.3	343	1.4	0.4	-1.3	291	3.6	3.4	-1.3	273	11.6	11.6	-0.7	257	32.7	31.9	7.1	263	29.4	29.2	3.8	261	6.8	6.7	1.1			
2	308	3.9	3.1	-2.4	294	2.4	2.2	-1.0	275	3.3	3.3	-0.3	288	12.1	11.5	-3.8	272	26.2	26.2	-0.9	262	32.4	32.1	4.7	253	10.8	10.3	3.2			
3	288	2.0	1.9	-0.6	276	0.9	0.9	-0.1	325	1.6	0.9	-1.3	286	11.9	11.5	-3.2	270	27.0	27.0	0.2	252	32.2	30.6	10.0	272	28.4	28.4	-1.2			
4	315	2.7	1.9	-1.9	324	2.2	1.3	-1.8	302	2.6	2.2	-1.4	293	10.5	9.7	-4.1	262	27.9	27.6	3.8	262	32.6	32.3	4.7	262	15.8	15.7	2.1			
5	313	1.9	1.4	-1.3	300	2.4	2.1	-1.2	298	4.5	4.0	-2.1	277	10.3	10.2	-1.2	267	29.3	29.3	1.6	272	32.4	32.4	-1.2	278	17.5	17.3	-2.5			
6	290	2.0	1.9	-0.7	282	3.5	3.4	-0.7	284	5.5	5.3	-1.3	274	13.2	13.2	-0.9	268	26.3	26.3	1.1	259	32.6	32.0	6.3	247	25.9	23.9	10.1			
7	295	1.9	1.7	-0.8	284	3.3	3.2	-0.8	290	5.5	5.2	-1.9	282	15.3	15.0	-3.1	268	28.9	28.9	1.0	254	31.3	30.1	8.6	279	12.8	12.6	-2.0			
8	299	2.3	2.0	-1.1	314	2.9	2.1	-2.0	303	3.3	2.8	-1.8	284	13.6	13.2	-3.3	255	36.4	35.2	9.2	265	42.3	42.2	3.5	279	19.6	19.4	-2.9			
9	310	1.7	1.3	-1.1	324	1.4	0.8	-1.1	276	3.9	3.9	-0.4	282	14.5	14.2	-3.0	275	26.3	26.2	-2.5	255	35.4	34.2	9.1	261	22.4	22.1	3.4			
10	262	3.5	3.5	0.5	293	3.0	2.8	-1.2	289	4.6	4.4	-1.5	281	12.9	12.7	-2.5	256	28.6	27.7	7.0	252	27.2	25.9	8.4	260	6.8	6.7	1.2			
11	288	3.3	3.1	-1.0	300	3.4	3.0	-1.7	307	6.5	5.2	-3.9	288	13.9	13.2	-4.4	270	25.5	25.5	0.2	277	29.4	29.2	-3.4	210	3.0	1.5	2.6			
12	288	2.8	2.7	-0.9	297	2.5	2.2	-1.1	304	4.3	3.6	-2.4	294	10.5	9.6	-4.3	286	22.3	21.4	-6.3	278	24.2	23.9	-3.5	272	16.6	16.6	-0.7			
13	295	2.9	2.6	-1.2	310	2.5	1.9	-1.6	309	6.4	5.0	-4.0	296	12.7	11.5	-5.5	287	25.0	23.8	-7.5	265	31.9	31.8	2.6	258	7.0	6.8	1.5			
14	298	1.9	1.7	-0.9	298	2.7	2.4	-1.3	308	6.6	5.2	-4.1	286	12.6	12.1	-3.4	272	26.6	26.6	-1.1	266	33.0	32.9	2.3	241	10.8	9.4	5.3			
15	336	2.2	0.9	-2.0	305	2.4	2.0	-1.4	300	6.7	5.8	-3.4	301	12.4	10.6	-6.4	284	28.4	27.5	-7.1	270	33.9	33.9	0.1	280	32.0	31.5	-5.6			
16	311	0.9	0.7	-0.6	284	2.5	2.4	-0.6	289	6.0	5.7	-2.0	278	13.2	13.1	-1.9	274	29.7	29.6	-2.0	268	34.8	34.8	1.5	272	17.7	17.7	-0.7			
17	333	0.9	0.4	-0.8	290	2.0	1.9	-0.7	295	6.9	6.3	-2.9	280	14.3	14.1	-2.5	272	27.4	27.4	-0.8	272	38.1	38.1	-1.2	297	4.6	4.1	-2.1			
18	293	1.5	1.4	-0.6	281	2.0	2.0	-0.4	299	6.2	5.4	-3.0	273	17.3	17.3	-0.9	269	35.6	35.6	0.5	276	40.8	40.6	-4.4	273	47.0	46.9	-2.5			
19	276	1.8	1.8	-0.2	287	3.0	2.9	-0.9	292	7.1	6.6	-2.6	284	15.5	15.0	-3.8	276	37.3	37.1	-3.9	258	45.6	44.7	9.1	—	—	—	—			
20	291	1.9	1.8	-0.7	285	2.4	2.3	-0.6	307	4.6	3.7	-2.8	287	16.5	15.8	-4.8	278	35.8	35.4	-5.2	271	48.2	48.2	-0.8	256	29.0	28.1	7.0			
21	305	2.8	2.3	-1.6	306	3.7	3.0	-2.2	305	5.5	4.5	-3.1	279	14.8	14.6	-2.3	266	31.1	31.0	2.0	254	49.5	47.7	13.4	258	36.0	35.2	7.5			
22	308	2.3	1.8	-1.4	285	2.8	2.7	-0.7	286	5.6	5.4	-1.5	271	16.4	16.4	-0.2	261	37.1	36.7	5.7	254	44.8	43.0	12.5	272	13.7	13.7	-0.5			
23	289	3.6	3.4	-1.2	294	4.4	4.0	-1.8	289	9.2	8.7	-3.0	280	19.2	18.9	-3.2	270	37.9	37.9	-0.2	276	38.4	38.2	-4.2	240	14.0	12.1	7.1			
24	292	4.1	3.8	-1.5	305	4.7	3.8	-2.7	305	8.3	6.8	-4.8	284	14.2	13.8	-3.5	272	34.6	34.6	-1.2	303	38.3	32.2	-20.8	343	37.0	10.8	-35.4			
25	290	4.7	4.4	-1.6	300	5.6	4.9	-2.8	297	8.5	7.5	-3.9	273	17.6	17.6	-0.8	265	33.8	33.7	2.9	271	27.7	27.7	-0.3	282	13.0	12.7	-2.7			
26	292	3.5	3.2	-1.3	295	4.1	3.7	-1.7	300	8.3	7.2	-4.1	280	20.6	20.3	-3.4	269	37.1	37.1	0.4	266	40.9	40.8	2.9	—	—	—	—			
27	291	3.1	2.9	-1.1	295	3.8	3.4	-1.6	289	7.9	7.5	-2.6	275	18.5	18.4	-1.6	271	35.6	35.6	-0.9	256	48.5	47.1	11.5	296	9.5	8.5	-4.2			
28	292	2.7	2.5	-1.0	291	4.5	4.2	-1.6	293	8.4	7.7	-3.3	282	17.6	17.2	-3.6	261	39.1	38.6	6.3	255	47.5	45.9	12.3	291	36.0	33.6	-12.9			
29	296	3.7	3.3	-1.6	298	4.2	3.7	-2.0	293	8.6	7.9	-3.3	283	17.1	16.7	-3.8	272	32.8	32.8	-1.3	249	32.2	30.1	11.4	240	9.0	7.8	4.5			
30	305	3.8	3.1	-2.2	305	3.9	3.2	-2.2	292	7.1	6.6	-2.6	296	18.8	16.9	-8.3	281	33.9	33.3	-6.5	265	35.8	35.7	3.0	243	26.5	23.6	12.0			

Daily Normals of Upper Air Winds (1971-2000)

324

PATNA

DECEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	292	2.9	2.7	-1.1	294	4.6	4.2	-1.9	289	9.5	9.0	-3.1	288	19.7	18.7	-6.2	273	42.5	42.5	-2.0	261	31.0	30.6	4.8	257	15.7	15.3	3.4			
2	295	3.8	3.5	-1.6	294	4.8	4.4	-2.0	297	7.5	6.7	-3.4	290	16.8	15.8	-5.7	271	35.0	35.0	-0.7	268	35.1	35.1	1.1	255	17.3	16.7	4.6			
3	286	1.9	1.8	-0.5	292	3.2	3.0	-1.2	288	8.1	7.7	-2.5	280	14.8	14.6	-2.7	290	32.2	30.3	-11.0	277	34.6	34.4	-4.0	258	19.1	18.7	4.0			
4	282	3.3	3.2	-0.7	294	3.9	3.6	-1.6	307	9.2	7.4	-5.5	287	16.8	16.0	-5.0	283	36.2	35.3	-8.0	272	30.5	30.5	-1.0	295	15.9	14.4	-6.8			
5	279	3.1	3.1	-0.5	291	3.4	3.2	-1.2	303	9.0	7.5	-4.9	292	18.1	16.7	-6.9	274	32.0	31.9	-2.4	278	35.6	35.3	-4.8	321	13.2	8.4	-10.2			
6	306	2.9	2.3	-1.7	288	2.6	2.5	-0.8	303	9.2	7.7	-5.0	296	17.2	15.5	-7.5	278	29.3	29.0	-4.2	276	36.1	35.9	-4.0	—	—	—	—			
7	290	4.1	3.9	-1.4	293	3.3	3.0	-1.3	308	9.3	7.3	-5.8	294	15.5	14.2	-6.2	266	26.9	26.8	1.7	262	42.5	42.1	6.0	278	23.0	22.8	-3.2			
8	297	3.3	2.9	-1.5	311	2.0	1.5	-1.3	310	10.0	7.7	-6.4	293	21.1	19.4	-8.4	265	36.1	35.9	3.4	270	42.4	42.4	0.1	—	—	—	—			
9	281	3.3	3.2	-0.6	291	3.9	3.6	-1.4	292	10.6	9.8	-4.0	278	19.3	19.1	-2.8	274	35.8	35.7	-2.7	277	37.7	37.4	-4.4	240	19.0	16.5	9.5			
10	293	4.7	4.3	-1.8	282	3.8	3.7	-0.8	295	10.0	9.1	-4.2	287	22.1	21.2	-6.3	281	43.0	42.3	-8.0	289	44.6	42.1	-14.8	—	—	—	—			
11	290	4.6	4.3	-1.6	297	4.9	4.4	-2.2	298	9.6	8.5	-4.5	285	21.3	20.6	-5.6	286	40.5	38.9	-11.3	273	32.0	32.0	-1.7	—	—	—	—			
12	288	3.9	3.7	-1.2	304	5.0	4.2	-2.8	298	10.5	9.3	-4.9	285	22.8	22.0	-5.9	275	37.3	37.2	-3.1	271	37.1	37.1	-0.8	289	21.0	19.9	-6.8			
13	290	4.1	3.9	-1.4	290	4.9	4.6	-1.7	299	11.5	10.0	-5.6	277	21.5	21.3	-2.8	268	42.0	42.0	1.8	269	47.2	47.2	0.8	277	19.0	18.9	-2.3			
14	290	4.5	4.2	-1.5	301	5.7	4.9	-3.0	293	12.2	11.3	-4.7	283	17.9	17.4	-4.0	270	37.0	37.0	0.2	271	36.0	36.0	-0.6	262	25.0	24.8	3.5			
15	281	4.1	4.0	-0.8	298	5.2	4.6	-2.4	294	9.6	8.8	-3.9	283	20.6	20.0	-4.8	270	36.8	36.8	-0.2	272	46.8	46.8	-1.5	—	—	—	—			
16	291	2.5	2.3	-0.9	302	3.6	3.0	-1.9	296	6.9	6.2	-3.0	277	20.5	20.4	-2.4	280	35.0	34.5	-6.1	274	43.9	43.8	-3.1	—	—	—	—			
17	290	2.7	2.5	-0.9	274	2.8	2.8	-0.2	297	9.4	8.4	-4.3	288	16.2	15.4	-5.0	268	36.8	36.8	1.1	271	38.2	38.2	-0.9	274	16.4	16.4	-1.1			
18	297	2.5	2.2	-1.1	309	4.3	3.3	-2.7	288	8.9	8.4	-2.8	280	18.9	18.6	-3.3	280	40.0	39.4	-7.1	276	45.1	44.9	-4.6	—	—	—	—			
19	288	4.6	4.4	-1.4	292	5.4	5.0	-2.0	292	9.9	9.2	-3.7	286	18.1	17.4	-5.1	272	31.5	31.5	-1.2	266	41.2	41.1	2.8	270	18.0	18.0	0.0			
20	284	3.2	3.1	-0.8	285	5.0	4.8	-1.3	289	10.8	10.2	-3.5	280	19.7	19.4	-3.4	275	28.7	28.6	-2.3	268	34.7	34.7	1.5	256	32.6	31.6	7.9			
21	284	3.6	3.5	-0.9	299	3.7	3.2	-1.8	307	10.1	8.1	-6.0	303	17.2	14.5	-9.3	285	33.6	32.4	-8.8	261	36.1	35.7	5.5	286	40.0	38.5	-11.0			
22	297	3.0	2.7	-1.4	298	1.7	1.5	-0.8	295	7.4	6.7	-3.1	289	19.7	18.6	-6.5	282	31.7	31.0	-6.5	273	28.2	28.2	-1.6	—	—	—	—			
23	289	2.8	2.6	-0.9	292	2.7	2.5	-1.0	298	9.4	8.3	-4.4	290	18.6	17.5	-6.4	276	34.2	34.0	-3.7	268	40.2	40.2	1.3	267	26.7	26.7	1.4			
24	278	1.4	1.4	-0.2	270	1.5	1.5	0.0	299	8.0	7.0	-3.9	276	17.2	17.1	-1.8	261	35.2	34.8	5.3	263	42.4	42.1	5.3	255	26.0	25.1	6.7			
25	284	1.2	1.2	-0.3	294	2.2	2.0	-0.9	291	6.0	5.6	-2.2	280	16.7	16.4	-3.0	272	34.2	34.2	-1.4	261	42.1	41.5	6.8	—	—	—	—			
26	301	3.3	2.8	-1.7	280	2.2	2.2	-0.4	286	6.6	6.3	-1.8	283	19.4	18.9	-4.5	274	43.7	43.6	-3.3	274	38.3	38.2	-3.0	—	—	—	—			
27	281	2.6	2.6	-0.5	285	4.2	4.1	-1.1	293	9.0	8.3	-3.5	278	18.4	18.2	-2.4	274	36.4	36.3	-2.3	261	45.8	45.2	7.3	235	15.0	12.3	8.6			
28	284	3.0	2.9	-0.7	283	4.8	4.7	-1.1	293	10.2	9.4	-4.0	289	21.3	20.2	-6.9	273	36.6	36.6	-1.6	271	39.5	39.5	-1.0	273	31.0	31.0	-1.6			
29	288	2.9	2.8	-0.9	295	4.4	4.0	-1.9	292	10.0	9.3	-3.7	271	17.8	17.8	-0.4	263	41.1	40.8	5.1	264	33.2	33.0	3.6	—	—	—	—			
30	281	2.5	2.5	-0.5	279	4.4	4.3	-0.7	291	10.8	10.1	-3.8	277	21.4	21.2	-2.6	275	42.3	42.2	-3.5	260	38.0	37.4	6.7	—	—	—	—			
31	282	3.4	3.3	-0.7	295	4.4	4.0	-1.9	287	8.4	8.0	-2.4	283	20.1	19.6	-4.4	263	37.8	37.5	4.7	263	39.2	38.9	4.6	—	—	—	—			

Daily Normals of Upper Air Winds (1971-2000)

PORTBLAIR

JANUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	65	6.5	-5.9	-2.8	72	4.4	-4.2	-1.4	103	1.7	-1.7	0.4	67	2.8	-2.6	-1.1	242	1.7	1.5	0.8	232	4.8	3.8	3.0	134	4.6	-3.3	3.2
2	61	6.8	-6.0	-3.3	84	3.0	-3.0	-0.3	62	1.9	-1.7	-0.9	78	3.9	-3.8	-0.8	247	1.3	1.2	0.5	201	4.3	1.5	4.0	120	2.4	-2.1	1.2
3	60	6.2	-5.4	-3.1	84	3.7	-3.7	-0.4	77	2.3	-2.2	-0.5	75	3.0	-2.9	-0.8	299	1.0	0.9	-0.5	208	5.3	2.5	4.7	97	7.0	-6.9	0.9
4	63	5.9	-5.3	-2.7	94	4.8	-4.8	0.3	88	2.3	-2.3	-0.1	54	2.2	-1.8	-1.3	252	1.3	1.2	0.4	223	7.8	5.3	5.7	97	3.5	-3.5	0.4
5	69	5.9	-5.5	-2.1	95	4.5	-4.5	0.4	101	2.0	-2.0	0.4	75	4.2	-4.1	-1.1	213	1.7	0.9	1.4	198	8.2	2.6	7.8	102	1.9	-1.9	0.4
6	74	5.8	-5.6	-1.6	95	3.7	-3.7	0.3	83	2.4	-2.4	-0.3	88	2.8	-2.8	-0.1	211	3.3	1.7	2.8	212	7.1	3.8	6.0	162	1.9	-0.6	1.8
7	68	6.8	-6.3	-2.5	88	5.0	-5.0	-0.2	90	2.9	-2.9	0.0	61	2.3	-2.0	-1.1	228	4.0	3.0	2.7	204	10.7	4.4	9.7	256	2.1	2.0	0.5
8	60	6.1	-5.3	-3.1	81	4.7	-4.6	-0.7	80	2.7	-2.7	-0.5	86	2.6	-2.6	-0.2	213	3.8	2.1	3.2	212	7.9	4.2	6.7	139	4.5	-3.0	3.4
9	59	4.7	-4.0	-2.4	76	3.2	-3.1	-0.8	36	0.9	-0.5	-0.7	65	1.7	-1.5	-0.7	250	4.6	4.3	1.6	224	7.0	4.9	5.0	231	4.1	3.2	2.6
10	52	5.0	-3.9	-3.1	76	3.0	-2.9	-0.7	99	2.5	-2.5	0.4	116	2.8	-2.5	1.2	253	3.4	3.2	1.0	198	8.3	2.6	7.9	216	3.1	1.8	2.5
11	63	5.6	-5.0	-2.6	86	4.0	-4.0	-0.3	78	2.9	-2.8	-0.6	103	2.6	-2.5	0.6	215	4.5	2.6	3.7	201	6.8	2.4	6.4	177	1.8	-0.1	1.8
12	63	5.5	-4.9	-2.5	86	4.9	-4.9	-0.3	87	3.7	-3.7	-0.2	118	2.4	-2.1	1.1	238	3.6	3.1	1.9	211	7.7	3.9	6.6	177	3.4	-0.2	3.4
13	61	5.4	-4.7	-2.6	86	4.3	-4.3	-0.3	86	3.2	-3.2	-0.2	87	2.1	-2.1	-0.1	214	5.9	3.3	4.9	224	9.5	6.6	6.9	127	7.5	-6.0	4.5
14	61	4.6	-4.0	-2.2	82	4.5	-4.5	-0.6	77	2.8	-2.7	-0.6	67	0.8	-0.7	-0.3	256	3.7	3.6	0.9	230	9.4	7.2	6.1	166	3.7	-0.9	3.6
15	68	5.4	-5.0	-2.0	87	5.1	-5.1	-0.3	88	2.7	-2.7	-0.1	140	0.8	-0.5	0.6	256	5.5	5.3	1.3	217	9.0	5.4	7.2	126	3.1	-2.5	1.8
16	54	6.1	-4.9	-3.6	80	4.7	-4.6	-0.8	87	2.0	-2.0	-0.1	165	1.1	-0.3	1.1	285	3.1	3.0	-0.8	212	8.6	4.5	7.3	189	3.1	0.5	3.1
17	61	5.5	-4.8	-2.7	77	4.7	-4.6	-1.1	90	2.3	-2.3	0.0	70	1.5	-1.4	-0.5	260	2.3	2.3	0.4	201	7.4	2.7	6.9	182	4.6	0.2	4.6
18	51	5.8	-4.5	-3.6	81	5.2	-5.1	-0.8	108	1.6	-1.5	0.5	11	1.5	-0.3	-1.5	260	3.6	3.5	0.6	198	6.9	2.1	6.6	55	2.9	-2.4	-1.7
19	52	4.6	-3.6	-2.8	91	4.7	-4.7	0.1	72	0.3	-0.3	-0.1	302	0.9	0.8	-0.5	276	2.9	2.9	-0.3	228	6.1	4.5	4.1	191	2.0	0.4	2.0
20	68	4.8	-4.4	-1.8	93	3.3	-3.3	0.2	90	0.5	-0.5	0.0	45	0.6	-0.4	-0.4	231	4.6	3.6	2.9	223	8.8	6.0	6.4	166	6.6	-1.6	6.4
21	63	5.4	-4.8	-2.4	82	4.1	-4.1	-0.6	135	1.0	-0.7	0.7	180	0.9	0.0	0.9	231	4.0	3.1	2.5	234	5.3	4.3	3.1	157	7.3	-2.8	6.7
22	54	5.2	-4.2	-3.0	75	3.8	-3.7	-1.0	70	2.0	-1.9	-0.7	207	0.9	0.4	0.8	224	5.0	3.5	3.6	230	8.6	6.6	5.5	149	7.4	-3.8	6.3
23	31	4.1	-2.1	-3.5	77	3.1	-3.0	-0.7	74	2.2	-2.1	-0.6	349	0.5	0.1	-0.5	229	3.7	2.8	2.4	230	7.8	6.0	5.0	204	4.3	1.7	3.9
24	29	4.7	-2.3	-4.1	77	3.6	-3.5	-0.8	63	1.3	-1.2	-0.6	28	1.5	-0.7	-1.3	249	6.6	6.2	2.4	237	8.1	6.8	4.4	250	2.0	1.9	0.7
25	35	5.6	-3.2	-4.6	83	3.1	-3.1	-0.4	86	1.3	-1.3	-0.1	360	0.3	0.0	-0.3	249	5.0	4.7	1.8	219	7.6	4.8	5.9	42	3.8	-2.5	-2.8
26	50	5.2	-4.0	-3.4	90	3.8	-3.8	0.0	108	1.3	-1.2	0.4	330	1.6	0.8	-1.4	248	3.2	3.0	1.2	223	9.8	6.6	7.2	129	6.3	-4.9	3.9
27	65	5.4	-4.9	-2.3	96	3.8	-3.8	0.4	119	1.3	-1.1	0.6	124	0.4	-0.3	0.2	239	2.6	2.2	1.3	234	5.7	4.6	3.3	130	5.4	-4.1	3.5
28	70	6.3	-5.9	-2.2	79	4.1	-4.0	-0.8	79	1.6	-1.6	-0.3	56	0.4	-0.3	-0.2	240	4.0	3.5	2.0	235	6.3	5.2	3.6	111	2.2	-2.1	0.8
29	70	5.8	-5.4	-2.0	92	3.8	-3.8	0.1	59	1.7	-1.5	-0.9	80	1.7	-1.7	-0.3	237	4.5	3.8	2.5	220	7.1	4.6	5.4	346	2.1	0.5	-2.0
30	72	5.8	-5.5	-1.8	78	4.3	-4.2	-0.9	84	1.8	-1.8	-0.2	5	2.1	-0.2	-2.1	237	4.4	3.7	2.4	228	7.4	5.5	4.9	147	1.7	-0.9	1.4
31	78	5.2	-5.1	-1.1	81	4.3	-4.2	-0.7	83	1.6	-1.6	-0.2	80	1.1	-1.1	-0.2	242	4.4	3.9	2.1	222	7.7	5.2	5.7	157	2.3	-0.9	2.1

Daily Normals of Upper Air Winds (1971-2000)

326

PORTBLAIR

FEBRUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	85	4.6	-4.6	-0.4	97	3.9	-3.9	0.5	117	0.9	-0.8	0.4	103	0.9	-0.9	0.2	232	4.6	3.6	2.8	224	6.2	4.3	4.5	122	1.5	-1.3	0.8			
2	94	4.4	-4.4	0.3	97	3.9	-3.9	0.5	111	1.4	-1.3	0.5	191	1.0	0.2	1.0	244	5.2	4.7	2.3	222	8.5	5.7	6.3	158	4.3	-1.6	4.0			
3	78	4.4	-4.3	-0.9	84	2.9	-2.9	-0.3	127	1.0	-0.8	0.6	233	0.5	0.4	0.3	230	6.5	5.0	4.2	218	8.0	4.9	6.3	191	2.5	0.5	2.5			
4	57	5.0	-4.2	-2.7	90	3.2	-3.2	0.0	73	1.0	-1.0	-0.3	247	0.8	0.7	0.3	258	5.5	5.4	1.1	205	6.1	2.6	5.5	147	4.5	-2.5	3.8			
5	68	4.6	-4.3	-1.7	88	3.2	-3.2	-0.1	124	0.4	-0.3	0.2	272	2.5	2.5	-0.1	244	5.5	4.9	2.4	227	8.3	6.1	5.7	255	3.1	3.0	0.8			
6	69	5.3	-4.9	-1.9	76	4.2	-4.1	-1.0	280	2.2	2.2	-0.4	225	0.7	0.5	0.5	234	3.7	3.0	2.2	196	8.6	2.4	8.3	156	3.4	-1.4	3.1			
7	59	5.1	-4.4	-2.6	78	4.5	-4.4	-0.9	342	0.6	0.2	-0.6	287	1.4	1.3	-0.4	235	7.5	6.1	4.3	226	9.3	6.7	6.5	226	5.7	4.1	3.9			
8	51	3.6	-2.8	-2.3	76	3.0	-2.9	-0.7	256	0.4	0.4	0.1	275	1.1	1.1	-0.1	222	4.5	3.0	3.3	237	8.7	7.3	4.7	190	2.7	0.5	2.7			
9	53	3.5	-2.8	-2.1	81	3.3	-3.3	-0.5	42	1.3	-0.9	-1.0	259	2.1	2.1	0.4	245	8.6	7.8	3.6	224	8.8	6.1	6.4	252	3.2	3.0	1.0			
10	46	4.7	-3.4	-3.3	72	4.2	-4.0	-1.3	82	0.7	-0.7	-0.1	294	1.7	1.6	-0.7	242	5.3	4.7	2.5	222	9.3	6.2	6.9	192	1.4	0.3	1.4			
11	56	4.8	-4.0	-2.7	64	3.2	-2.9	-1.4	149	0.6	-0.3	0.5	320	0.8	0.5	-0.6	234	3.2	2.6	1.9	244	7.0	6.3	3.1	117	2.9	-2.6	1.3			
12	37	5.4	-3.2	-4.3	68	3.5	-3.3	-1.3	63	0.9	-0.8	-0.4	17	1.4	-0.4	-1.3	250	4.6	4.3	1.6	202	9.1	3.4	8.4	147	3.7	-2.0	3.1			
13	52	3.9	-3.1	-2.4	73	3.4	-3.2	-1.0	67	1.5	-1.4	-0.6	21	1.7	-0.6	-1.6	261	0.6	0.6	0.1	212	6.2	3.3	5.2	128	3.7	-2.9	2.3			
14	58	4.0	-3.4	-2.1	95	3.3	-3.3	0.3	113	1.5	-1.4	0.6	32	1.3	-0.7	-1.1	254	1.9	1.8	0.5	202	5.6	2.1	5.2	113	5.2	-4.8	2.0			
15	56	3.0	-2.5	-1.7	99	2.6	-2.6	0.4	90	1.7	-1.7	0.0	71	2.1	-2.0	-0.7	219	1.4	0.9	1.1	195	5.2	1.3	5.0	111	4.3	-4.0	1.5			
16	72	3.3	-3.1	-1.0	86	2.9	-2.9	-0.2	82	0.7	-0.7	-0.1	106	0.7	-0.7	0.2	162	0.3	-0.1	0.3	177	3.3	-0.2	3.3	119	6.5	-5.7	3.2			
17	53	1.5	-1.2	-0.9	95	3.5	-3.5	0.3	103	2.8	-2.7	0.6	90	1.4	-1.4	0.0	148	2.2	-1.2	1.9	191	5.6	1.1	5.5	56	0.4	-0.3	-0.2			
18	35	1.6	-0.9	-1.3	63	2.5	-2.2	-1.1	105	2.0	-1.9	0.5	60	1.4	-1.2	-0.7	154	3.0	-1.3	2.7	188	6.1	0.8	6.0	146	2.5	-1.4	2.1			
19	40	3.4	-2.2	-2.6	68	3.2	-3.0	-1.2	77	2.2	-2.1	-0.5	81	3.7	-3.7	-0.6	146	2.7	-1.5	2.2	169	6.7	-1.3	6.6	145	4.7	-2.7	3.9			
20	65	4.3	-3.9	-1.8	86	3.1	-3.1	-0.2	77	2.3	-2.2	-0.5	108	2.2	-2.1	0.7	45	0.1	-0.1	-0.1	180	6.9	0.0	6.9	142	3.3	-2.0	2.6			
21	67	2.1	-1.9	-0.8	80	2.7	-2.7	-0.5	96	2.0	-2.0	0.2	115	1.9	-1.7	0.8	185	2.1	0.2	2.1	192	5.2	1.1	5.1	75	2.3	-2.2	-0.6			
22	68	3.1	-2.9	-1.2	72	3.3	-3.1	-1.0	105	2.0	-1.9	0.5	96	1.8	-1.8	0.2	182	3.0	0.1	3.0	186	9.0	1.0	8.9	88	3.6	-3.6	-0.1			
23	75	2.4	-2.3	-0.6	69	2.8	-2.6	-1.0	119	2.1	-1.8	1.0	135	1.3	-0.9	0.9	201	2.8	1.0	2.6	205	5.4	2.3	4.9	113	2.5	-2.3	1.0			
24	41	4.0	-2.6	-3.0	65	3.1	-2.8	-1.3	84	2.0	-2.0	-0.2	101	2.1	-2.1	0.4	194	2.5	0.6	2.4	207	7.5	3.4	6.7	92	2.5	-2.5	0.1			
25	56	4.0	-3.3	-2.2	78	2.9	-2.8	-0.6	87	2.1	-2.1	-0.1	86	1.3	-1.3	-0.1	229	2.0	1.5	1.3	199	7.3	2.4	6.9	138	2.7	-1.8	2.0			
26	38	3.9	-2.4	-3.1	77	2.7	-2.6	-0.6	113	2.3	-2.1	0.9	360	0.6	0.0	-0.6	255	5.5	5.3	1.4	220	8.7	5.6	6.7	264	4.0	4.0	0.4			
27	59	4.1	-3.5	-2.1	82	2.7	-2.7	-0.4	105	2.3	-2.2	0.6	112	1.8	-1.7	0.7	252	4.9	4.7	1.5	220	6.0	3.9	4.6	164	3.2	-0.9	3.1			
28	53	3.6	-2.9	-2.2	73	3.1	-3.0	-0.9	105	2.4	-2.3	0.6	121	0.6	-0.5	0.3	227	4.4	3.2	3.0	208	5.0	2.3	4.4	108	6.5	-6.2	2.0			
29	48	6.2	-4.6	-4.1	31	2.1	-1.1	-1.8	37	4.8	-2.9	-3.8	18	4.4	-1.4	-4.2	202	3.5	1.3	3.3	177	12.0	-0.6	12.0	75	7.2	-6.9	-1.9			

Daily Normals of Upper Air Winds (1971-2000)

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PORTBLAIR

MARCH

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	57	4.3	-3.6	-2.3	64	3.7	-3.3	-1.6	126	1.7	-1.4	1.0	219	0.6	0.4	0.5	248	5.8	5.4	2.2	220	6.9	4.4	5.3	127	2.5	-2.0	1.5			
2	46	3.3	-2.4	-2.3	84	2.7	-2.7	-0.3	78	2.5	-2.4	-0.5	63	0.2	-0.2	-0.1	249	4.3	4.0	1.5	195	7.7	2.0	7.4	157	4.8	-1.9	4.4			
3	59	2.9	-2.5	-1.5	73	4.2	-4.0	-1.2	85	3.3	-3.3	-0.3	22	1.1	-0.4	-1.0	219	4.1	2.6	3.2	214	6.8	3.8	5.6	143	3.8	-2.3	3.0			
4	30	2.0	-1.0	-1.7	88	3.4	-3.4	-0.1	78	1.9	-1.9	-0.4	360	0.5	0.0	-0.5	224	4.9	3.4	3.5	208	7.3	3.4	6.5	90	2.8	-2.8	0.0			
5	12	1.9	-0.4	-1.9	71	2.4	-2.3	-0.8	66	1.7	-1.6	-0.7	90	1.2	-1.2	0.0	226	6.2	4.4	4.3	209	8.0	3.9	7.0	149	6.6	-3.4	5.7			
6	352	1.4	0.2	-1.4	63	2.8	-2.5	-1.3	66	2.2	-2.0	-0.9	77	1.3	-1.3	-0.3	238	5.2	4.4	2.7	200	9.0	3.1	8.4	125	3.5	-2.9	2.0			
7	25	3.3	-1.4	-3.0	68	3.1	-2.9	-1.2	57	3.0	-2.5	-1.6	101	0.5	-0.5	0.1	220	4.5	2.9	3.5	205	6.6	2.8	6.0	255	1.6	1.5	0.4			
8	41	2.1	-1.4	-1.6	61	3.5	-3.1	-1.7	61	2.6	-2.3	-1.3	59	2.1	-1.8	-1.1	223	3.7	2.5	2.7	212	7.2	3.8	6.1	114	1.0	-0.9	0.4			
9	44	3.2	-2.2	-2.3	57	3.0	-2.5	-1.6	65	3.8	-3.4	-1.6	90	2.1	-2.1	0.0	225	3.7	2.6	2.6	203	5.6	2.2	5.2	124	4.5	-3.7	2.5			
10	46	2.8	-2.0	-1.9	57	3.8	-3.2	-2.1	60	3.4	-2.9	-1.7	75	2.4	-2.3	-0.6	224	4.9	3.4	3.5	205	7.7	3.2	7.0	183	3.3	0.2	3.3			
11	52	1.6	-1.3	-1.0	80	3.4	-3.3	-0.6	92	2.4	-2.4	0.1	107	2.4	-2.3	0.7	238	2.8	2.4	1.5	219	7.0	4.4	5.4	112	5.0	-4.6	1.9			
12	51	1.9	-1.5	-1.2	63	2.5	-2.2	-1.1	100	2.9	-2.9	0.5	108	1.3	-1.2	0.4	222	4.6	3.1	3.4	213	6.9	3.8	5.8	81	5.7	-5.6	-0.9			
13	69	3.3	-3.1	-1.2	80	2.9	-2.9	-0.5	97	3.5	-3.5	0.4	98	1.5	-1.5	0.2	240	3.9	3.4	2.0	222	8.4	5.6	6.2	155	2.3	-1.0	2.1			
14	61	2.3	-2.0	-1.1	71	3.4	-3.2	-1.1	80	2.9	-2.9	-0.5	131	1.1	-0.8	0.7	252	7.5	7.1	2.3	236	9.5	7.9	5.3	260	2.9	2.9	0.5			
15	61	2.5	-2.2	-1.2	55	3.7	-3.0	-2.1	70	2.7	-2.5	-0.9	90	0.6	-0.6	0.0	252	7.0	6.6	2.2	239	8.1	6.9	4.2	128	1.6	-1.3	1.0			
16	68	0.5	-0.5	-0.2	68	3.5	-3.2	-1.3	47	1.8	-1.3	-1.2	40	1.6	-1.0	-1.2	252	4.7	4.5	1.5	242	8.7	7.7	4.1	125	1.6	-1.3	0.9			
17	7	1.7	-0.2	-1.7	65	2.1	-1.9	-0.9	50	2.3	-1.8	-1.5	60	1.4	-1.2	-0.7	248	4.3	4.0	1.6	233	6.7	5.4	4.0	153	2.5	-1.1	2.2			
18	112	0.5	-0.5	0.2	63	1.8	-1.6	-0.8	51	2.6	-2.0	-1.6	24	1.0	-0.4	-0.9	237	4.5	3.8	2.5	235	9.2	7.5	5.3	153	2.7	-1.2	2.4			
19	360	1.1	0.0	-1.1	54	2.2	-1.8	-1.3	72	2.3	-2.2	-0.7	356	1.4	0.1	-1.4	243	5.3	4.7	2.4	223	8.4	5.7	6.2	147	4.4	-2.4	3.7			
20	39	1.3	-0.8	-1.0	57	2.0	-1.7	-1.1	80	2.3	-2.3	-0.4	53	0.5	-0.4	-0.3	237	4.3	3.6	2.3	239	8.6	7.4	4.4	172	0.7	-0.1	0.7			
21	56	2.3	-1.9	-1.3	54	2.4	-1.9	-1.4	93	2.1	-2.1	0.1	27	1.1	-0.5	-1.0	258	5.7	5.6	1.2	231	8.0	6.2	5.1	188	2.8	0.4	2.8			
22	—	—	—	—	56	2.9	-2.4	-1.6	85	2.2	-2.2	-0.2	156	1.0	-0.4	0.9	244	3.9	3.5	1.7	234	7.7	6.3	4.5	141	2.8	-1.8	2.2			
23	148	1.5	-0.8	1.3	82	2.1	-2.1	-0.3	93	3.4	-3.4	0.2	138	1.2	-0.8	0.9	243	7.2	6.4	3.3	243	10.6	9.5	4.8	315	1.8	1.3	-1.3			
24	108	2.5	-2.4	0.8	76	2.9	-2.8	-0.7	97	3.4	-3.4	0.4	158	0.5	-0.2	0.5	242	6.7	5.9	3.2	228	8.5	6.3	5.7	123	2.7	-2.3	1.5			
25	124	3.4	-2.8	1.9	85	2.5	-2.5	-0.2	97	3.5	-3.5	0.4	97	1.6	-1.6	0.2	248	6.6	6.1	2.5	239	9.7	8.3	5.0	77	1.7	-1.7	-0.4			
26	94	3.9	-3.9	0.3	90	3.0	-3.0	0.0	100	4.0	-3.9	0.7	129	0.6	-0.5	0.4	260	8.8	8.7	1.5	243	9.8	8.7	4.5	182	2.4	0.1	2.4			
27	98	3.6	-3.6	0.5	93	3.6	-3.6	0.2	90	3.3	-3.3	0.0	95	2.2	-2.2	0.2	251	5.5	5.2	1.8	250	7.8	7.3	2.7	180	1.5	0.0	1.5			
28	103	3.7	-3.6	0.8	92	3.4	-3.4	0.1	88	3.8	-3.8	-0.1	94	1.5	-1.5	0.1	265	4.7	4.7	0.4	229	10.0	7.5	6.6	164	1.5	-0.4	1.4			
29	93	3.6	-3.6	0.2	74	3.5	-3.4	-1.0	87	3.3	-3.3	-0.2	148	1.5	-0.8	1.3	232	6.0	4.7	3.7	228	8.4	6.3	5.6	126	2.2	-1.8	1.3			
30	107	3.1	-3.0	0.9	72	3.2	-3.0	-1.0	81	3.1	-3.1	-0.5	79	0.5	-0.5	-0.1	241	5.7	5.0	2.8	228	7.8	5.8	5.2	131	3.5	-2.6	2.3			
31	80	2.8	-2.8	-0.5	75	3.0	-2.9	-0.8	92	3.0	-3.0	0.1	59	2.7	-2.3	-1.4	244	5.2	4.7	2.3	221	7.2	4.7	5.4	92	2.6	-2.6	0.1			

Daily Normals of Upper Air Winds (1971-2000)

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PORTBLAIR

APRIL

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	58	1.9	-1.6	-1.0	72	2.8	-2.7	-0.9	88	2.9	-2.9	-0.1	98	1.4	-1.4	0.2	226	3.2	2.3	2.2	229	7.4	5.6	4.8	264	2.7	2.7	0.3			
2	36	2.7	-1.6	-2.2	73	2.4	-2.3	-0.7	90	2.6	-2.6	0.0	98	2.2	-2.2	0.3	260	4.2	4.1	0.7	224	6.5	4.5	4.7	107	1.0	-1.0	0.3			
3	69	2.2	-2.1	-0.8	72	2.3	-2.2	-0.7	78	3.3	-3.2	-0.7	79	2.1	-2.1	-0.4	248	3.5	3.2	1.3	221	7.5	4.9	5.7	64	2.8	-2.5	-1.2			
4	37	3.0	-1.8	-2.4	68	3.2	-3.0	-1.2	72	3.3	-3.1	-1.0	68	1.6	-1.5	-0.6	233	3.9	3.1	2.3	214	7.3	4.1	6.0	81	1.9	-1.9	-0.3			
5	45	1.6	-1.1	-1.1	71	2.4	-2.3	-0.8	85	4.3	-4.3	-0.4	70	1.5	-1.4	-0.5	237	3.1	2.6	1.7	226	5.7	4.1	3.9	98	5.2	-5.2	0.7			
6	18	1.9	-0.6	-1.8	59	2.7	-2.3	-1.4	77	3.6	-3.5	-0.8	90	1.6	-1.6	0.0	232	5.0	3.9	3.1	232	8.7	6.9	5.3	118	5.5	-4.8	2.6			
7	345	2.0	0.5	-1.9	47	2.1	-1.5	-1.4	103	2.3	-2.2	0.5	94	1.4	-1.4	0.1	261	4.0	4.0	0.6	245	6.6	6.0	2.8	105	6.1	-5.9	1.6			
8	335	1.7	0.7	-1.5	62	1.7	-1.5	-0.8	70	2.0	-1.9	-0.7	104	0.4	-0.4	0.1	321	3.3	2.1	-2.6	245	5.2	4.7	2.2	94	2.6	-2.6	0.2			
9	12	2.4	-0.5	-2.3	69	2.8	-2.6	-1.0	57	2.4	-2.0	-1.3	34	0.4	-0.2	-0.3	305	1.6	1.3	-0.9	204	6.8	2.8	6.2	146	2.7	-1.5	2.2			
10	360	1.5	0.0	-1.5	59	1.7	-1.5	-0.9	68	2.7	-2.5	-1.0	41	0.9	-0.6	-0.7	162	0.6	-0.2	0.6	184	5.1	0.4	5.1	90	1.5	-1.5	0.0			
11	69	1.9	-1.8	-0.7	81	2.0	-2.0	-0.3	82	2.8	-2.8	-0.4	85	3.3	-3.3	-0.3	219	2.1	1.3	1.6	201	6.9	2.5	6.4	128	2.3	-1.8	1.4			
12	38	2.3	-1.4	-1.8	48	1.5	-1.1	-1.0	85	2.2	-2.2	-0.2	65	2.9	-2.6	-1.2	237	2.7	2.3	1.5	209	6.6	3.2	5.8	131	1.1	-0.8	0.7			
13	22	0.5	-0.2	-0.5	66	2.0	-1.8	-0.8	73	2.7	-2.6	-0.8	75	2.4	-2.3	-0.6	223	2.1	1.4	1.5	215	6.7	3.9	5.5	63	3.0	-2.7	-1.4			
14	11	0.5	-0.1	-0.5	62	2.1	-1.9	-1.0	76	3.2	-3.1	-0.8	90	1.9	-1.9	0.0	229	2.1	1.6	1.4	192	5.3	1.1	5.2	67	3.6	-3.3	-1.4			
15	32	0.9	-0.5	-0.8	68	2.2	-2.0	-0.8	73	3.4	-3.3	-1.0	101	2.5	-2.5	0.5	208	3.0	1.4	2.6	225	3.8	2.7	2.7	119	2.5	-2.2	1.2			
16	293	0.8	0.7	-0.3	73	1.7	-1.6	-0.5	92	3.2	-3.2	0.1	115	1.7	-1.5	0.7	215	3.9	2.2	3.2	201	5.3	1.9	5.0	218	3.7	2.3	2.9			
17	253	1.4	1.3	0.4	73	1.4	-1.3	-0.4	110	2.0	-1.9	0.7	68	1.1	-1.0	-0.4	225	2.0	1.4	1.4	205	5.9	2.5	5.3	120	3.2	-2.8	1.6			
18	261	3.1	3.1	0.5	81	0.6	-0.6	-0.1	100	1.7	-1.7	0.3	81	1.3	-1.3	-0.2	215	2.9	1.7	2.4	214	5.4	3.0	4.5	134	3.5	-2.5	2.4			
19	16	0.7	-0.2	-0.7	48	1.2	-0.9	-0.8	87	2.1	-2.1	-0.1	80	1.7	-1.7	-0.3	239	1.7	1.5	0.9	212	6.0	3.2	5.1	80	1.7	-1.7	-0.3			
20	180	0.2	0.0	0.2	52	1.1	-0.9	-0.7	80	2.8	-2.8	-0.5	61	1.8	-1.6	-0.9	239	3.1	2.7	1.6	224	4.3	3.0	3.1	130	3.8	-2.9	2.4			
21	207	0.9	0.4	0.8	95	1.2	-1.2	0.1	100	2.3	-2.3	0.4	102	3.0	-2.9	0.6	235	1.6	1.3	0.9	210	6.9	3.4	6.0	106	3.2	-3.1	0.9			
22	108	0.6	-0.6	0.2	62	1.5	-1.3	-0.7	92	3.0	-3.0	0.1	134	2.8	-2.0	1.9	221	3.8	2.5	2.9	225	6.6	4.7	4.7	144	2.9	-1.7	2.3			
23	239	1.2	1.0	0.6	180	0.1	0.0	0.1	87	1.7	-1.7	-0.1	115	1.4	-1.3	0.6	251	4.6	4.4	1.5	235	6.6	5.4	3.8	101	2.5	-2.5	0.5			
24	247	0.8	0.7	0.3	108	0.6	-0.6	0.2	101	1.6	-1.6	0.3	81	1.2	-1.2	-0.2	254	2.5	2.4	0.7	226	5.5	4.0	3.8	114	3.2	-2.9	1.3			
25	43	1.9	-1.3	-1.4	90	1.4	-1.4	0.0	103	3.2	-3.1	0.7	110	1.5	-1.4	0.5	232	2.8	2.2	1.7	221	5.8	3.8	4.4	130	9.2	-7.0	5.9			
26	146	0.4	-0.2	0.3	105	1.6	-1.5	0.4	104	2.9	-2.8	0.7	127	2.1	-1.7	1.3	212	3.8	2.0	3.2	207	5.9	2.7	5.2	9	1.3	-0.2	-1.3			
27	235	1.9	1.6	1.1	117	0.7	-0.6	0.3	119	1.3	-1.1	0.6	108	1.6	-1.5	0.5	208	4.4	2.1	3.9	208	4.5	2.1	4.0	104	5.8	-5.6	1.4			
28	13	1.7	-0.4	-1.7	107	1.4	-1.3	0.4	71	1.8	-1.7	-0.6	235	1.6	1.3	0.9	227	3.8	2.8	2.6	228	4.0	3.0	2.7	96	9.7	-9.6	1.0			
29	11	1.6	-0.3	-1.6	82	0.7	-0.7	-0.1	83	1.7	-1.7	-0.2	290	1.2	1.1	-0.4	257	4.5	4.4	1.0	201	4.9	1.8	4.6	80	5.5	-5.4	-1.0			
30	300	1.4	1.2	-0.7	270	0.2	0.2	0.0	22	0.5	-0.2	-0.5	245	1.4	1.3	0.6	253	2.8	2.7	0.8	186	3.9	0.4	3.9	95	9.2	-9.2	0.8			

Daily Normals of Upper Air Winds (1971-2000)

PORTBLAIR

MAY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	203	2.8	1.1	2.6	194	0.8	0.2	0.8	87	1.9	-1.9	-0.1	207	0.7	0.3	0.6	231	1.4	1.1	0.9	206	3.0	1.3	2.7	105	5.1	-4.9	1.3			
2	196	1.5	0.4	1.4	158	0.5	-0.2	0.5	83	0.8	-0.8	-0.1	86	1.5	-1.5	-0.1	219	1.4	0.9	1.1	232	1.1	0.9	0.7	93	8.3	-8.3	0.4			
3	213	2.0	1.1	1.7	254	0.7	0.7	0.2	180	0.5	0.0	0.5	52	1.1	-0.9	-0.7	164	1.5	-0.4	1.4	135	0.6	-0.4	0.4	87	8.4	-8.4	-0.4			
4	214	3.0	1.7	2.5	246	1.2	1.1	0.5	229	1.1	0.8	0.7	197	1.0	0.3	1.0	146	0.4	-0.2	0.3	170	3.4	-0.6	3.3	93	10.7	-10.7	0.5			
5	221	3.0	2.0	2.3	230	1.6	1.2	1.0	180	0.2	0.0	0.2	248	0.5	0.5	0.2	169	1.5	-0.3	1.5	106	2.5	-2.4	0.7	98	7.5	-7.4	1.0			
6	263	3.2	3.2	0.4	288	0.3	0.3	-0.1	165	1.1	-0.3	1.1	132	1.2	-0.9	0.8	156	1.7	-0.7	1.6	123	5.6	-4.7	3.1	96	8.5	-8.5	0.9			
7	284	2.5	2.4	-0.6	240	1.4	1.2	0.7	129	1.3	-1.0	0.8	164	0.7	-0.2	0.7	127	2.0	-1.6	1.2	125	4.5	-3.7	2.6	84	8.2	-8.2	-0.8			
8	266	4.2	4.2	0.3	253	1.4	1.3	0.4	58	0.9	-0.8	-0.5	96	1.0	-1.0	0.1	180	1.5	0.0	1.5	134	5.5	-4.0	3.8	97	8.7	-8.6	1.1			
9	262	4.2	4.2	0.6	200	1.5	0.5	1.4	68	0.5	-0.5	-0.2	—	—	—	—	127	3.1	-2.5	1.9	144	4.2	-2.5	3.4	104	8.5	-8.3	2.0			
10	250	4.4	4.1	1.5	246	2.0	1.8	0.8	124	0.4	-0.3	0.2	125	1.2	-1.0	0.7	130	2.3	-1.8	1.5	141	3.8	-2.4	3.0	92	9.4	-9.4	0.3			
11	260	3.4	3.3	0.6	222	2.8	1.9	2.1	180	1.0	0.0	1.0	79	0.5	-0.5	-0.1	117	3.3	-2.9	1.5	115	4.3	-3.9	1.8	104	10.6	-10.3	2.5			
12	214	1.4	0.8	1.2	229	1.8	1.4	1.2	180	0.9	0.0	0.9	151	1.3	-0.6	1.1	118	4.7	-4.1	2.2	114	3.0	-2.7	1.2	101	10.4	-10.2	1.9			
13	275	4.3	4.3	-0.4	258	2.4	2.3	0.5	210	1.6	0.8	1.4	170	1.1	-0.2	1.1	108	3.5	-3.3	1.1	98	5.9	-5.8	0.8	94	11.3	-11.3	0.7			
14	212	3.8	2.0	3.2	248	3.8	3.5	1.4	229	2.3	1.7	1.5	195	2.0	0.5	1.9	140	3.8	-2.4	2.9	104	8.1	-7.9	1.9	90	11.8	-11.8	-0.1			
15	227	6.3	4.6	4.3	243	4.0	3.6	1.8	223	1.9	1.3	1.4	221	1.8	1.2	1.4	149	4.1	-2.1	3.5	112	5.8	-5.4	2.2	92	13.9	-13.9	0.5			
16	225	6.6	4.7	4.7	238	4.7	4.0	2.5	230	4.8	3.7	3.1	213	3.1	1.7	2.6	133	2.5	-1.8	1.7	89	6.7	-6.7	-0.1	88	11.6	-11.6	-0.5			
17	234	9.4	7.6	5.6	247	6.5	6.0	2.5	246	5.4	4.9	2.2	242	4.9	4.3	2.3	139	2.9	-1.9	2.2	94	6.2	-6.2	0.4	78	13.5	-13.2	-2.8			
18	260	8.8	8.7	1.6	263	7.4	7.3	0.9	274	4.6	4.6	-0.3	272	3.7	3.7	-0.1	118	3.8	-3.4	1.8	102	7.0	-6.8	1.5	93	13.9	-13.9	0.7			
19	242	8.6	7.6	4.1	247	5.4	5.0	2.1	283	2.8	2.7	-0.6	273	1.8	1.8	-0.1	129	2.7	-2.1	1.7	97	9.0	-8.9	1.1	93	13.5	-13.5	0.7			
20	260	6.8	6.7	1.2	254	4.5	4.3	1.2	283	2.6	2.5	-0.6	257	2.3	2.2	0.5	90	0.1	-0.1	0.0	111	7.1	-6.6	2.5	104	14.1	-13.7	3.4			
21	262	7.3	7.2	1.0	256	5.7	5.5	1.4	274	3.2	3.2	-0.2	240	2.8	2.4	1.4	90	2.2	-2.2	0.0	88	10.2	-10.2	-0.3	98	18.2	-18.0	2.4			
22	240	6.1	5.3	3.1	253	6.2	5.9	1.8	273	4.2	4.2	-0.2	242	3.4	3.0	1.6	125	3.3	-2.7	1.9	90	5.8	-5.8	0.0	93	12.2	-12.2	0.7			
23	263	6.1	6.1	0.7	253	5.1	4.9	1.5	265	4.3	4.3	0.4	224	3.3	2.3	2.4	131	4.3	-3.2	2.8	103	9.9	-9.7	2.2	95	16.0	-15.9	1.4			
24	242	6.9	6.1	3.2	250	6.6	6.2	2.2	264	5.7	5.7	0.6	244	2.5	2.3	1.1	115	5.3	-4.8	2.2	91	10.3	-10.3	0.1	83	17.3	-17.2	-2.2			
25	251	8.9	8.4	2.9	249	6.7	6.3	2.4	261	4.6	4.5	0.7	253	2.4	2.3	0.7	130	4.3	-3.3	2.8	92	9.3	-9.3	0.3	87	16.1	-16.1	-0.9			
26	253	2.7	2.6	0.8	245	4.3	3.9	1.8	262	3.0	3.0	0.4	216	2.6	1.5	2.1	115	4.7	-4.2	2.0	100	9.2	-9.1	1.6	88	16.4	-16.4	-0.6			
27	243	9.8	8.7	4.5	246	7.2	6.6	3.0	247	4.8	4.4	1.9	247	2.8	2.6	1.1	126	3.1	-2.5	1.8	103	7.3	-7.1	1.6	92	23.8	-23.8	1.0			
28	253	7.5	7.2	2.2	246	7.7	7.1	3.1	246	5.6	5.1	2.3	225	3.1	2.2	2.2	114	3.6	-3.3	1.5	75	10.6	-10.2	-2.7	92	17.3	-17.3	0.7			
29	255	8.2	7.9	2.1	251	7.5	7.1	2.5	252	6.3	6.0	2.0	228	3.8	2.8	2.5	105	4.2	-4.1	1.1	80	10.7	-10.5	-1.9	89	22.3	-22.3	-0.3			
30	254	7.4	7.1	2.0	246	8.2	7.5	3.3	248	6.7	6.2	2.5	221	5.2	3.4	3.9	102	3.8	-3.7	0.8	78	10.3	-10.1	-2.1	91	20.6	-20.6	0.3			
31	243	4.2	3.8	1.9	250	9.2	8.7	3.1	253	7.4	7.1	2.2	231	3.3	2.6	2.1	109	4.3	-4.1	1.4	76	10.5	-10.2	-2.5	76	17.8	-17.3	-4.2			

Daily Normals of Upper Air Winds (1971-2000)

330

PORTBLAIR

JUNE

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	259	4.7	4.6	0.9	252	7.4	7.0	2.3	240	7.2	6.2	3.6	229	5.3	4.0	3.5	117	2.8	-2.5	1.3	73	10.5	-10.1	-3.0	84	17.7	-17.6	-1.7			
2	254	4.6	4.4	1.3	248	6.7	6.2	2.5	243	4.8	4.3	2.2	221	4.1	2.7	3.1	80	4.8	-4.7	-0.8	81	12.3	-12.1	-2.0	89	16.8	-16.8	-0.2			
3	246	5.7	5.2	2.3	251	8.7	8.2	2.9	245	5.1	4.6	2.1	212	4.1	2.2	3.5	105	4.8	-4.6	1.2	75	13.3	-12.8	-3.5	86	25.0	-24.9	-1.8			
4	244	5.0	4.5	2.2	251	7.8	7.4	2.5	247	4.3	4.0	1.7	223	4.4	3.0	3.2	97	5.9	-5.9	0.7	77	15.3	-14.9	-3.4	95	23.2	-23.1	2.0			
5	248	5.7	5.3	2.1	248	7.9	7.3	2.9	259	5.7	5.6	1.1	206	3.2	1.4	2.9	96	6.2	-6.2	0.7	79	13.6	-13.3	-2.6	85	21.0	-20.9	-1.8			
6	238	6.2	5.2	3.3	250	7.9	7.4	2.7	246	5.4	4.9	2.2	207	3.1	1.4	2.8	79	6.7	-6.6	-1.3	67	13.4	-12.3	-5.3	80	25.5	-25.1	-4.5			
7	252	8.3	7.9	2.6	253	9.1	8.7	2.7	261	6.2	6.1	1.0	223	3.8	2.6	2.8	88	6.4	-6.4	-0.2	74	14.3	-13.7	-4.0	83	20.9	-20.7	-2.6			
8	238	6.1	5.2	3.2	249	8.3	7.7	3.0	250	6.1	5.7	2.1	242	4.7	4.1	2.2	99	4.5	-4.4	0.7	70	15.5	-14.6	-5.2	79	30.5	-29.9	-6.0			
9	222	8.7	5.8	6.5	241	9.5	8.3	4.6	252	6.4	6.1	2.0	254	5.4	5.2	1.5	80	5.3	-5.2	-0.9	78	17.5	-17.1	-3.6	83	23.4	-23.2	-3.0			
10	215	7.2	4.2	5.9	238	9.2	7.8	4.8	238	7.3	6.2	3.8	231	3.5	2.7	2.2	95	4.9	-4.9	0.4	78	13.9	-13.6	-3.0	83	23.9	-23.7	-3.0			
11	217	8.1	4.9	6.5	232	9.3	7.4	5.7	239	7.2	6.2	3.7	235	4.5	3.7	2.6	106	6.3	-6.1	1.7	75	16.7	-16.1	-4.4	76	25.6	-24.8	-6.2			
12	230	9.2	7.1	5.9	240	10.7	9.2	5.4	241	9.1	8.0	4.4	239	5.5	4.7	2.8	86	7.9	-7.9	-0.5	66	15.1	-13.8	-6.2	82	21.3	-21.1	-3.0			
13	224	10.8	7.5	7.8	236	11.0	9.1	6.2	243	8.5	7.6	3.9	224	5.4	3.8	3.9	81	5.2	-5.1	-0.8	67	15.2	-14.0	-6.0	91	24.8	-24.8	0.3			
14	222	8.8	5.9	6.5	241	10.8	9.5	5.2	248	9.2	8.5	3.5	242	6.1	5.4	2.9	73	8.4	-8.1	-2.4	65	16.4	-14.8	-7.0	82	24.1	-23.9	-3.4			
15	248	9.1	8.4	3.4	246	10.5	9.6	4.3	252	9.3	8.8	2.9	239	4.1	3.5	2.1	76	3.4	-3.3	-0.8	70	11.2	-10.5	-3.9	84	21.2	-21.1	-2.4			
16	239	9.5	8.1	4.9	246	10.3	9.4	4.1	256	8.0	7.8	1.9	252	4.7	4.5	1.5	71	9.0	-8.5	-3.0	68	16.7	-15.5	-6.3	85	21.0	-20.9	-1.8			
17	235	10.6	8.7	6.1	248	11.4	10.6	4.3	254	9.2	8.8	2.6	260	5.7	5.6	1.0	77	6.5	-6.3	-1.5	69	16.9	-15.8	-6.1	87	29.2	-29.2	-1.3			
18	244	9.9	8.9	4.3	249	10.3	9.6	3.6	260	8.0	7.9	1.4	278	3.7	3.7	-0.5	82	8.5	-8.4	-1.2	62	17.9	-15.9	-8.3	85	28.3	-28.2	-2.6			
19	240	9.2	8.0	4.6	254	9.9	9.5	2.7	260	8.8	8.7	1.5	279	3.7	3.7	-0.6	71	7.2	-6.8	-2.3	73	17.6	-16.8	-5.2	90	25.6	-25.6	0.0			
20	244	8.6	7.7	3.8	251	10.5	9.9	3.5	262	7.4	7.3	1.0	246	4.5	4.1	1.8	81	6.8	-6.7	-1.1	77	15.0	-14.6	-3.5	88	32.8	-32.8	-1.2			
21	246	10.7	9.7	4.4	243	10.6	9.4	4.8	248	9.1	8.4	3.4	239	2.9	2.5	1.5	79	7.0	-6.9	-1.4	71	17.8	-16.8	-5.8	81	27.8	-27.5	-4.3			
22	248	11.3	10.5	4.2	246	11.9	10.8	4.9	260	7.8	7.7	1.4	250	3.2	3.0	1.1	75	9.1	-8.8	-2.3	71	16.9	-15.9	-5.6	80	27.2	-26.8	-4.8			
23	235	11.5	9.4	6.7	246	11.2	10.2	4.6	256	9.6	9.3	2.3	266	4.3	4.3	0.3	72	6.6	-6.3	-2.0	69	18.9	-17.6	-6.9	84	30.9	-30.7	-3.2			
24	247	9.6	8.9	3.7	252	10.4	9.9	3.2	261	8.1	8.0	1.3	260	5.1	5.0	0.9	84	9.4	-9.3	-1.0	72	20.4	-19.4	-6.4	84	28.7	-28.6	-2.8			
25	243	11.7	10.4	5.3	255	11.3	10.9	3.0	262	8.5	8.4	1.2	262	5.1	5.1	0.7	77	8.9	-8.7	-2.0	66	19.9	-18.2	-8.1	78	29.1	-28.5	-5.8			
26	235	11.0	9.0	6.4	249	11.0	10.2	4.0	259	8.5	8.3	1.6	269	4.9	4.9	0.1	83	8.5	-8.4	-1.0	67	19.4	-17.9	-7.5	84	29.0	-28.8	-3.1			
27	241	9.2	8.1	4.4	246	10.1	9.2	4.1	253	7.7	7.4	2.2	264	3.7	3.7	0.4	74	6.9	-6.6	-1.9	71	18.6	-17.6	-6.0	76	28.5	-27.7	-6.9			
28	241	8.8	7.7	4.3	248	9.5	8.8	3.5	260	7.5	7.4	1.3	249	4.3	4.0	1.5	79	7.3	-7.2	-1.4	78	17.9	-17.5	-3.7	80	28.4	-28.0	-4.8			
29	248	9.5	8.8	3.5	252	10.2	9.7	3.2	259	8.9	8.7	1.7	251	3.7	3.5	1.2	75	9.1	-8.8	-2.3	69	18.5	-17.2	-6.7	91	32.6	-32.6	0.6			
30	250	12.6	11.8	4.4	247	10.9	10.0	4.3	253	7.3	7.0	2.2	225	3.8	2.7	2.7	76	8.5	-8.3	-2.0	74	16.4	-15.8	-4.5	84	31.2	-31.0	-3.4			

Daily Normals of Upper Air Winds (1971-2000)

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PORTBLAIR

JULY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	238	10.1	8.6	5.3	244	10.4	9.4	4.5	260	7.7	7.6	1.3	236	4.1	3.4	2.3	77	7.3	-7.1	-1.6	68	18.1	-16.8	-6.7	80	24.7	-24.4	-4.1			
2	231	8.7	6.8	5.5	246	9.4	8.6	3.8	259	6.6	6.5	1.3	236	4.6	3.8	2.6	71	8.2	-7.7	-2.7	80	18.8	-18.5	-3.2	85	29.8	-29.7	-2.7			
3	244	6.9	6.2	3.0	253	8.4	8.0	2.5	251	5.3	5.0	1.7	231	1.9	1.5	1.2	85	9.4	-9.4	-0.8	78	19.1	-18.7	-4.1	80	22.3	-21.9	-4.0			
4	244	7.9	7.1	3.5	250	9.2	8.6	3.2	258	6.9	6.8	1.4	270	2.5	2.5	0.0	69	10.4	-9.7	-3.7	72	20.8	-19.8	-6.3	86	28.4	-28.3	-2.1			
5	238	8.6	7.3	4.6	242	9.4	8.3	4.5	256	7.6	7.4	1.8	238	1.9	1.6	1.0	72	10.8	-10.3	-3.4	69	18.2	-17.0	-6.4	80	25.7	-25.3	-4.6			
6	238	10.2	8.6	5.4	250	9.7	9.1	3.4	254	6.2	6.0	1.7	240	2.4	2.1	1.2	81	8.0	-7.9	-1.3	66	17.1	-15.6	-7.1	92	25.5	-25.5	0.8			
7	234	9.2	7.4	5.4	249	10.3	9.6	3.7	252	7.1	6.8	2.2	239	3.3	2.8	1.7	75	8.2	-7.9	-2.1	68	16.2	-15.1	-6.0	80	26.3	-25.9	-4.8			
8	233	7.6	6.1	4.6	251	9.0	8.5	3.0	260	6.4	6.3	1.1	249	3.0	2.8	1.1	74	7.5	-7.2	-2.0	67	18.0	-16.5	-7.1	88	22.2	-22.2	-0.9			
9	240	9.4	8.1	4.7	249	8.8	8.2	3.2	252	6.9	6.6	2.1	248	3.2	3.0	1.2	58	6.2	-5.2	-3.3	70	17.7	-16.6	-6.1	84	29.1	-28.9	-3.0			
10	235	9.8	8.1	5.6	246	8.9	8.1	3.6	251	6.5	6.2	2.1	283	3.5	3.4	-0.8	68	7.9	-7.3	-2.9	69	16.1	-15.1	-5.7	83	27.9	-27.7	-3.2			
11	235	12.2	10.0	7.0	239	10.1	8.7	5.2	249	6.4	6.0	2.3	242	3.2	2.8	1.5	72	8.2	-7.8	-2.6	67	17.2	-15.8	-6.7	80	25.0	-24.6	-4.2			
12	239	10.5	9.0	5.5	247	9.7	8.9	3.8	256	7.7	7.5	1.9	252	3.9	3.7	1.2	71	9.7	-9.2	-3.1	63	19.1	-17.0	-8.6	82	24.5	-24.3	-3.4			
13	239	10.6	9.1	5.5	248	9.6	8.9	3.6	253	6.4	6.1	1.9	262	5.0	5.0	0.7	76	8.1	-7.9	-2.0	63	17.8	-15.9	-8.1	86	27.7	-27.6	-1.9			
14	242	11.1	9.8	5.3	248	9.5	8.8	3.5	253	7.6	7.3	2.2	252	3.8	3.6	1.2	74	7.8	-7.5	-2.2	70	16.5	-15.5	-5.7	81	27.0	-26.6	-4.4			
15	227	7.7	5.6	5.3	238	9.8	8.3	5.2	250	7.1	6.7	2.4	235	2.9	2.4	1.7	70	8.2	-7.7	-2.8	70	16.8	-15.8	-5.6	78	25.6	-25.0	-5.5			
16	236	10.1	8.3	5.7	245	9.9	9.0	4.2	252	6.7	6.4	2.1	242	4.3	3.8	2.0	65	6.7	-6.1	-2.8	61	17.1	-15.0	-8.2	73	26.7	-25.6	-7.7			
17	221	8.4	5.5	6.3	237	8.7	7.3	4.7	247	7.4	6.8	2.9	216	3.6	2.1	2.9	75	7.1	-6.9	-1.8	68	19.8	-18.3	-7.5	76	24.4	-23.7	-5.8			
18	225	7.6	5.4	5.4	246	8.7	8.0	3.5	253	6.8	6.5	2.0	251	2.1	2.0	0.7	77	8.2	-8.0	-1.8	78	17.6	-17.2	-3.8	90	24.9	-24.9	0.2			
19	235	8.0	6.6	4.6	247	9.1	8.4	3.5	269	6.1	6.1	0.1	254	1.5	1.4	0.4	72	10.0	-9.5	-3.1	68	16.8	-15.6	-6.3	79	27.6	-27.1	-5.2			
20	239	9.7	8.3	5.0	251	8.9	8.4	2.9	260	5.4	5.3	0.9	253	1.0	1.0	0.3	81	8.1	-8.0	-1.2	76	19.6	-19.1	-4.6	83	32.7	-32.5	-3.9			
21	246	9.6	8.8	3.9	243	8.0	7.2	3.6	249	4.9	4.6	1.8	207	2.5	1.1	2.2	86	8.4	-8.4	-0.6	78	17.8	-17.4	-3.7	82	28.7	-28.4	-3.9			
22	250	10.9	10.2	3.8	248	8.7	8.1	3.2	249	6.0	5.6	2.2	217	1.5	0.9	1.2	89	7.4	-7.4	-0.1	80	17.8	-17.5	-3.2	81	30.9	-30.5	-5.0			
23	247	11.1	10.2	4.3	246	9.6	8.8	3.9	260	7.2	7.1	1.3	218	1.6	1.0	1.3	83	7.9	-7.8	-0.9	76	14.2	-13.8	-3.4	81	32.5	-32.1	-5.0			
24	245	12.8	11.6	5.5	249	9.9	9.2	3.6	259	7.1	7.0	1.4	243	3.6	3.2	1.6	87	8.5	-8.5	-0.5	73	20.8	-19.9	-5.9	84	26.4	-26.3	-2.7			
25	247	14.1	13.0	5.4	247	10.1	9.3	4.0	251	7.9	7.5	2.6	241	4.5	3.9	2.2	77	7.2	-7.0	-1.6	66	19.5	-17.8	-8.0	79	25.6	-25.1	-5.0			
26	250	12.6	11.8	4.3	254	10.1	9.7	2.7	261	8.5	8.4	1.3	241	3.1	2.7	1.5	72	8.8	-8.4	-2.7	73	18.5	-17.7	-5.3	84	25.0	-24.8	-2.8			
27	241	12.0	10.5	5.9	248	10.1	9.4	3.8	253	7.3	7.0	2.1	217	2.6	1.6	2.1	70	8.4	-7.9	-2.9	72	19.5	-18.5	-6.1	85	29.2	-29.1	-2.6			
28	245	10.8	9.8	4.5	253	10.0	9.6	2.9	249	8.1	7.6	2.9	226	3.5	2.5	2.4	78	8.9	-8.7	-1.8	69	19.3	-18.0	-6.9	86	25.9	-25.8	-1.9			
29	250	10.3	9.7	3.5	253	9.3	8.9	2.8	254	7.3	7.0	2.0	231	3.2	2.5	2.0	75	7.5	-7.3	-1.9	68	21.4	-19.8	-8.0	81	28.9	-28.5	-4.5			
30	248	11.2	10.4	4.1	253	9.7	9.3	2.9	255	8.0	7.7	2.1	233	6.0	4.8	3.6	68	6.8	-6.3	-2.6	75	19.5	-18.8	-5.2	84	29.2	-29.0	-3.0			
31	241	10.5	9.2	5.0	249	10.5	9.8	3.7	252	7.8	7.4	2.4	248	4.8	4.4	1.8	76	7.7	-7.5	-1.9	69	20.0	-18.7	-7.0	80	23.2	-22.8	-4.1			

Daily Normals of Upper Air Winds (1971-2000)

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PORTBLAIR

AUGUST

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	230	7.0	5.4	4.5	249	10.3	9.6	3.6	261	8.1	8.0	1.3	221	3.0	2.0	2.3	71	7.2	-6.8	-2.4	65	18.8	-17.0	-8.1	78	28.3	-27.7	-5.9			
2	235	9.3	7.7	5.3	249	9.4	8.8	3.4	250	7.5	7.0	2.6	230	3.0	2.3	1.9	90	8.5	-8.5	0.0	69	19.5	-18.2	-7.0	83	29.0	-28.8	-3.3			
3	239	10.0	8.6	5.1	253	8.4	8.0	2.5	258	6.6	6.4	1.4	235	2.4	2.0	1.4	74	9.3	-9.0	-2.5	73	20.2	-19.3	-6.0	83	29.6	-29.4	-3.5			
4	239	10.5	9.0	5.5	248	9.7	9.0	3.7	255	5.8	5.6	1.5	243	1.8	1.6	0.8	81	9.7	-9.6	-1.5	69	19.3	-18.1	-6.8	77	30.7	-29.9	-6.9			
5	244	11.7	10.5	5.2	249	10.4	9.7	3.7	261	7.9	7.8	1.3	257	3.2	3.1	0.7	83	9.2	-9.1	-1.1	66	17.6	-16.1	-7.2	79	26.7	-26.2	-4.9			
6	245	11.9	10.7	5.1	250	10.8	10.1	3.7	260	8.1	8.0	1.4	263	4.6	4.6	0.6	80	7.2	-7.1	-1.2	68	18.0	-16.7	-6.6	77	25.3	-24.7	-5.6			
7	249	12.3	11.5	4.5	251	10.9	10.3	3.5	257	8.9	8.7	2.0	250	5.4	5.1	1.9	71	8.3	-7.8	-2.7	67	17.1	-15.7	-6.8	77	26.0	-25.3	-5.9			
8	251	12.3	11.6	4.0	252	10.4	9.9	3.2	257	7.8	7.6	1.7	268	3.5	3.5	0.1	87	9.4	-9.4	-0.5	71	16.8	-15.9	-5.4	84	28.3	-28.1	-3.0			
9	246	11.1	10.1	4.6	249	10.8	10.1	3.8	260	7.8	7.7	1.3	255	4.3	4.2	1.1	81	8.1	-8.0	-1.3	72	19.3	-18.3	-6.1	87	24.4	-24.4	-1.4			
10	236	11.0	9.1	6.1	252	10.9	10.4	3.4	252	8.3	7.9	2.5	263	4.2	4.2	0.5	61	8.7	-7.6	-4.2	76	20.7	-20.1	-5.1	82	26.7	-26.4	-3.8			
11	239	9.2	7.9	4.8	250	11.1	10.4	3.8	256	9.3	9.0	2.2	261	5.0	4.9	0.8	81	5.6	-5.5	-0.9	67	18.8	-17.3	-7.4	83	25.2	-25.0	-3.1			
12	245	9.3	8.4	3.9	252	11.1	10.6	3.4	255	9.4	9.1	2.4	261	5.1	5.0	0.8	84	7.2	-7.2	-0.8	72	19.6	-18.7	-6.0	82	26.0	-25.8	-3.6			
13	239	10.2	8.7	5.3	252	11.4	10.9	3.5	261	9.1	9.0	1.4	254	4.0	3.8	1.1	84	13.4	-13.3	-1.5	66	18.7	-17.1	-7.5	84	24.4	-24.3	-2.7			
14	238	9.8	8.3	5.2	250	10.4	9.8	3.5	260	7.1	7.0	1.2	237	3.1	2.6	1.7	78	8.2	-8.0	-1.7	67	18.4	-17.0	-7.1	86	26.0	-26.0	-1.6			
15	245	9.1	8.2	3.9	250	10.1	9.5	3.4	258	7.6	7.4	1.6	229	3.0	2.3	2.0	84	8.7	-8.7	-0.9	68	19.3	-17.9	-7.3	83	22.9	-22.8	-2.6			
16	244	8.4	7.5	3.7	251	9.7	9.2	3.2	266	7.2	7.2	0.5	260	2.8	2.8	0.5	76	8.5	-8.3	-2.0	80	18.5	-18.2	-3.3	74	22.7	-21.8	-6.3			
17	243	9.1	8.1	4.2	257	9.1	8.9	2.0	264	5.9	5.9	0.6	278	2.1	2.1	-0.3	71	10.6	-10.0	-3.5	75	19.7	-19.1	-5.0	85	24.5	-24.4	-2.1			
18	246	9.0	8.2	3.6	256	9.3	9.0	2.2	263	7.7	7.6	1.0	277	4.2	4.2	-0.5	74	8.1	-7.8	-2.2	72	17.7	-16.8	-5.6	89	25.5	-25.5	-0.5			
19	230	4.2	3.2	2.7	256	10.3	10.0	2.5	267	7.5	7.5	0.4	252	4.7	4.5	1.5	70	7.1	-6.7	-2.4	74	18.4	-17.7	-5.2	91	27.9	-27.9	0.4			
20	258	7.6	7.4	1.6	255	10.0	9.7	2.6	261	7.5	7.4	1.2	239	3.5	3.0	1.8	65	6.3	-5.7	-2.6	74	16.0	-15.4	-4.3	80	24.4	-24.0	-4.4			
21	249	7.6	7.1	2.7	250	9.3	8.7	3.2	257	7.3	7.1	1.6	264	3.8	3.8	0.4	86	8.2	-8.2	-0.6	77	17.1	-16.6	-3.9	85	24.9	-24.8	-2.1			
22	237	9.4	7.9	5.1	251	9.2	8.7	3.0	255	6.1	5.9	1.6	213	2.4	1.3	2.0	78	9.4	-9.2	-1.9	74	20.0	-19.3	-5.4	79	25.4	-24.9	-4.9			
23	256	9.2	8.9	2.3	256	8.2	8.0	2.0	264	5.9	5.9	0.6	279	1.8	1.8	-0.3	88	10.5	-10.5	-0.3	76	17.2	-16.7	-4.2	84	27.5	-27.4	-2.8			
24	250	9.6	9.0	3.3	256	9.5	9.2	2.3	255	7.9	7.6	2.1	280	2.3	2.3	-0.4	79	9.3	-9.1	-1.7	77	18.9	-18.4	-4.2	83	27.5	-27.3	-3.3			
25	248	10.3	9.6	3.8	249	9.8	9.2	3.5	255	7.3	7.0	1.9	242	2.7	2.4	1.3	79	7.9	-7.8	-1.5	68	21.0	-19.4	-8.0	80	25.9	-25.5	-4.6			
26	244	10.3	9.3	4.5	246	11.1	10.1	4.5	250	8.0	7.5	2.7	217	3.0	1.8	2.4	79	9.4	-9.2	-1.8	68	21.0	-19.4	-8.0	81	23.9	-23.6	-3.6			
27	246	12.5	11.4	5.1	248	10.2	9.5	3.8	250	7.7	7.3	2.6	216	5.1	3.0	4.1	76	9.4	-9.1	-2.2	69	19.0	-17.7	-6.8	86	27.3	-27.2	-1.8			
28	247	11.6	10.7	4.5	255	9.0	8.7	2.4	262	6.7	6.6	0.9	252	2.3	2.2	0.7	75	9.7	-9.4	-2.5	70	17.3	-16.3	-5.9	84	24.8	-24.7	-2.5			
29	253	11.3	10.8	3.3	259	9.8	9.6	1.8	254	5.8	5.6	1.6	266	1.6	1.6	0.1	70	9.0	-8.4	-3.1	71	19.2	-18.1	-6.4	84	23.2	-23.1	-2.5			
30	244	11.5	10.3	5.1	254	8.4	8.1	2.3	270	5.5	5.5	0.0	270	0.2	0.2	0.0	86	7.5	-7.5	-0.5	71	16.3	-15.4	-5.4	93	28.6	-28.6	1.6			
31	244	10.1	9.1	4.4	254	9.2	8.9	2.5	258	5.5	5.4	1.1	257	2.2	2.1	0.5	75	7.9	-7.6	-2.1	73	18.2	-17.4	-5.2	97	28.1	-27.9	3.2			

Daily Normals of Upper Air Winds (1971-2000)

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PORTBLAIR

SEPTEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	243	10.6	9.5	4.8	255	8.5	8.2	2.2	265	5.9	5.9	0.5	166	1.2	-0.3	1.2	87	9.1	-9.1	-0.4	77	17.2	-16.8	-3.9	89	27.1	-27.1	-0.4			
2	253	10.3	9.9	3.0	255	7.7	7.4	2.0	263	6.4	6.3	0.8	219	2.2	1.4	1.7	80	10.5	-10.3	-1.9	77	18.6	-18.1	-4.1	88	25.5	-25.5	-0.8			
3	254	8.5	8.2	2.4	256	8.3	8.1	2.0	267	5.7	5.7	0.3	257	2.2	2.1	0.5	82	10.7	-10.6	-1.5	70	18.0	-16.9	-6.3	90	23.7	-23.7	-0.2			
4	234	10.2	8.2	6.0	258	7.9	7.7	1.7	278	5.2	5.2	-0.7	217	0.5	0.3	0.4	95	11.3	-11.3	0.9	81	18.6	-18.4	-2.8	93	22.0	-22.0	1.0			
5	243	8.8	7.8	4.0	258	8.0	7.8	1.7	263	5.8	5.8	0.7	305	1.2	1.0	-0.7	79	8.0	-7.9	-1.5	81	19.0	-18.7	-3.1	91	26.4	-26.4	0.6			
6	245	9.4	8.5	3.9	268	8.2	8.2	0.3	285	5.7	5.5	-1.5	323	1.0	0.6	-0.8	75	8.0	-7.7	-2.0	75	15.5	-15.0	-3.9	92	23.5	-23.5	0.7			
7	250	9.0	8.4	3.1	257	9.3	9.1	2.1	264	6.3	6.3	0.7	273	1.9	1.9	-0.1	83	7.0	-6.9	-0.9	71	15.1	-14.3	-4.8	89	22.5	-22.5	-0.5			
8	249	7.1	6.6	2.5	248	7.2	6.7	2.7	240	4.8	4.1	2.4	203	2.6	1.0	2.4	81	7.9	-7.8	-1.3	67	16.9	-15.6	-6.5	85	23.0	-22.9	-2.0			
9	255	7.1	6.9	1.8	248	7.1	6.6	2.6	245	5.1	4.6	2.1	210	2.8	1.4	2.4	91	9.2	-9.2	0.2	86	16.3	-16.3	-1.2	82	22.1	-21.9	-3.0			
10	251	9.3	8.8	3.1	246	7.9	7.2	3.2	244	4.9	4.4	2.1	225	1.1	0.8	0.8	87	7.9	-7.9	-0.4	77	17.1	-16.7	-3.9	84	23.9	-23.8	-2.3			
11	253	9.0	8.6	2.7	250	7.2	6.8	2.5	258	4.9	4.8	1.0	330	0.8	0.4	-0.7	75	6.5	-6.3	-1.7	85	14.4	-14.3	-1.3	87	17.5	-17.5	-0.9			
12	258	5.4	5.3	1.1	261	6.2	6.1	1.0	273	4.5	4.5	-0.2	90	0.2	-0.2	0.0	86	8.0	-8.0	-0.6	83	15.7	-15.6	-1.8	88	19.8	-19.8	-0.8			
13	271	9.9	9.9	-0.1	264	5.3	5.3	0.6	268	3.7	3.7	0.1	297	1.1	1.0	-0.5	75	7.1	-6.9	-1.8	86	12.8	-12.8	-0.8	87	17.3	-17.3	-0.8			
14	262	8.7	8.6	1.2	255	5.6	5.4	1.4	262	3.7	3.7	0.5	315	0.1	0.1	-0.1	81	7.6	-7.5	-1.2	82	15.4	-15.2	-2.2	88	16.7	-16.7	-0.5			
15	265	9.6	9.6	0.8	256	5.4	5.2	1.3	267	3.7	3.7	0.2	333	0.2	0.1	-0.2	82	8.3	-8.2	-1.2	83	15.0	-14.9	-1.7	88	19.1	-19.1	-0.7			
16	261	9.8	9.7	1.6	259	5.4	5.3	1.0	275	3.5	3.5	-0.3	93	1.7	-1.7	0.1	96	7.1	-7.1	0.7	91	15.3	-15.3	0.2	86	18.5	-18.4	-1.4			
17	266	8.0	8.0	0.5	262	4.9	4.9	0.7	256	3.3	3.2	0.8	110	1.2	-1.1	0.4	89	7.3	-7.3	-0.1	94	13.5	-13.5	0.9	98	17.7	-17.5	2.5			
18	262	7.6	7.5	1.0	265	5.6	5.6	0.5	270	3.8	3.8	0.0	114	1.0	-0.9	0.4	94	6.5	-6.5	0.4	92	12.3	-12.3	0.5	93	16.9	-16.9	0.9			
19	254	7.4	7.1	2.0	263	5.6	5.6	0.7	257	4.1	4.0	0.9	193	1.3	0.3	1.3	86	4.7	-4.7	-0.3	87	13.3	-13.3	-0.7	90	20.4	-20.4	0.1			
20	254	7.4	7.1	2.1	246	6.0	5.5	2.4	234	3.4	2.8	2.0	159	0.9	-0.3	0.8	86	7.9	-7.9	-0.5	86	16.3	-16.3	-1.2	80	19.3	-19.0	-3.5			
21	247	6.0	5.5	2.3	245	5.6	5.1	2.4	233	3.4	2.7	2.0	241	1.0	0.9	0.5	94	6.0	-6.0	0.4	78	12.6	-12.3	-2.7	90	19.9	-19.9	0.0			
22	250	5.9	5.5	2.0	239	5.2	4.5	2.7	231	3.2	2.5	2.0	140	1.6	-1.0	1.2	94	6.5	-6.5	0.5	78	13.4	-13.1	-2.7	89	20.1	-20.1	-0.2			
23	234	5.8	4.7	3.4	237	5.1	4.3	2.8	236	2.9	2.4	1.6	137	1.8	-1.2	1.3	87	8.1	-8.1	-0.4	83	13.9	-13.8	-1.8	92	21.3	-21.3	0.7			
24	247	4.4	4.1	1.7	238	3.4	2.9	1.8	235	2.4	2.0	1.4	86	1.3	-1.3	-0.1	94	7.6	-7.6	0.5	75	14.1	-13.6	-3.7	86	20.9	-20.8	-1.5			
25	261	2.6	2.6	0.4	246	4.3	3.9	1.7	225	2.4	1.7	1.7	87	2.1	-2.1	-0.1	86	7.0	-7.0	-0.5	81	11.5	-11.4	-1.8	87	17.2	-17.2	-0.9			
26	254	3.3	3.2	0.9	257	3.6	3.5	0.8	231	2.2	1.7	1.4	124	2.7	-2.2	1.5	100	7.2	-7.1	1.2	92	13.0	-13.0	0.4	82	19.2	-19.0	-2.8			
27	238	3.8	3.2	2.0	243	3.9	3.5	1.8	223	1.6	1.1	1.2	125	2.4	-2.0	1.4	88	7.1	-7.1	-0.2	85	12.9	-12.8	-1.2	91	21.3	-21.3	0.3			
28	254	3.2	3.1	0.9	248	3.5	3.2	1.3	214	1.4	0.8	1.2	69	2.2	-2.1	-0.8	91	8.3	-8.3	0.1	84	13.9	-13.8	-1.5	85	20.4	-20.3	-1.6			
29	242	2.1	1.9	1.0	241	5.2	4.6	2.5	223	3.3	2.2	2.4	131	0.9	-0.7	0.6	84	6.2	-6.2	-0.6	87	11.5	-11.5	-0.7	85	17.5	-17.4	-1.5			
30	225	1.8	1.3	1.3	246	4.4	4.0	1.8	243	2.5	2.2	1.1	157	1.3	-0.5	1.2	91	5.8	-5.8	0.1	81	9.8	-9.7	-1.6	93	15.3	-15.3	0.8			

Daily Normals of Upper Air Winds (1971-2000)

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PORTBLAIR

OCTOBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	250	3.5	3.3	1.2	247	5.9	5.4	2.3	243	3.4	3.0	1.5	125	1.9	-1.6	1.1	92	7.2	-7.2	0.3	86	13.3	-13.3	-1.0	90	19.2	-19.2	-0.1			
2	246	4.5	4.1	1.8	250	5.0	4.7	1.7	251	2.1	2.0	0.7	79	1.6	-1.6	-0.3	96	7.6	-7.6	0.8	86	14.4	-14.4	-1.1	86	16.2	-16.2	-1.1			
3	264	4.0	4.0	0.4	251	4.2	4.0	1.4	252	2.3	2.2	0.7	122	1.5	-1.3	0.8	92	8.3	-8.3	0.3	84	12.4	-12.3	-1.4	94	17.7	-17.7	1.3			
4	250	2.7	2.5	0.9	240	4.6	4.0	2.3	229	2.9	2.2	1.9	92	2.3	-2.3	0.1	86	7.9	-7.9	-0.5	85	13.8	-13.8	-1.1	96	16.0	-15.9	1.7			
5	209	1.0	0.5	0.9	236	4.0	3.3	2.2	207	1.8	0.8	1.6	75	2.0	-1.9	-0.5	95	7.3	-7.3	0.6	86	14.3	-14.3	-1.1	84	15.4	-15.3	-1.6			
6	207	3.1	1.4	2.8	230	4.5	3.4	2.9	212	2.8	1.5	2.4	117	0.9	-0.8	0.4	88	6.9	-6.9	-0.2	91	11.3	-11.3	0.2	96	14.1	-14.0	1.5			
7	219	4.3	2.7	3.3	236	4.2	3.5	2.4	228	2.5	1.9	1.7	152	2.1	-1.0	1.9	98	7.1	-7.0	1.0	86	12.0	-12.0	-0.9	92	18.5	-18.5	0.6			
8	229	3.8	2.9	2.5	235	3.7	3.0	2.1	229	1.8	1.4	1.2	124	2.5	-2.1	1.4	89	7.8	-7.8	-0.1	88	11.0	-11.0	-0.4	91	13.2	-13.2	0.3			
9	248	2.7	2.5	1.0	246	3.4	3.1	1.4	234	0.9	0.7	0.5	80	2.2	-2.2	-0.4	85	5.2	-5.2	-0.5	89	12.3	-12.3	-0.2	95	19.3	-19.2	1.7			
10	302	1.5	1.3	-0.8	272	2.4	2.4	-0.1	277	0.8	0.8	-0.1	83	3.1	-3.1	-0.4	85	6.7	-6.7	-0.6	98	11.3	-11.2	1.5	86	12.6	-12.6	-0.8			
11	238	1.5	1.3	0.8	270	2.0	2.0	0.0	339	1.4	0.5	-1.3	68	2.4	-2.2	-0.9	92	4.8	-4.8	0.2	98	8.2	-8.1	1.1	100	13.0	-12.8	2.2			
12	193	1.8	0.4	1.8	253	1.4	1.3	0.4	153	0.7	-0.3	0.6	68	2.2	-2.0	-0.8	93	5.3	-5.3	0.3	99	9.6	-9.5	1.5	97	15.8	-15.7	2.0			
13	222	3.0	2.0	2.2	236	2.9	2.4	1.6	222	1.3	0.9	1.0	92	2.8	-2.8	0.1	96	5.3	-5.3	0.6	97	10.4	-10.3	1.3	98	11.8	-11.7	1.7			
14	236	2.9	2.4	1.6	224	2.8	1.9	2.0	234	1.4	1.1	0.8	121	2.3	-2.0	1.2	91	5.1	-5.1	0.1	102	7.5	-7.3	1.6	85	12.1	-12.1	-1.1			
15	235	2.8	2.3	1.6	231	2.1	1.6	1.3	171	1.2	-0.2	1.2	97	2.3	-2.3	0.3	91	5.1	-5.1	0.1	100	9.0	-8.9	1.5	100	15.0	-14.8	2.5			
16	215	2.8	1.6	2.3	193	2.2	0.5	2.1	192	1.4	0.3	1.4	99	3.1	-3.1	0.5	95	6.0	-6.0	0.5	97	10.9	-10.8	1.4	94	15.4	-15.4	1.0			
17	225	4.1	2.9	2.9	219	2.2	1.4	1.7	202	1.1	0.4	1.0	94	3.0	-3.0	0.2	97	6.4	-6.4	0.8	93	10.0	-10.0	0.6	93	16.2	-16.2	0.9			
18	196	2.6	0.7	2.5	185	1.1	0.1	1.1	180	1.0	0.0	1.0	90	2.5	-2.5	0.0	94	5.3	-5.3	0.4	94	12.7	-12.7	0.9	83	18.6	-18.5	-2.3			
19	209	2.5	1.2	2.2	139	1.1	-0.7	0.8	76	0.8	-0.8	-0.2	96	3.8	-3.8	0.4	73	3.9	-3.7	-1.1	101	7.1	-7.0	1.4	98	13.4	-13.3	1.8			
20	235	1.2	1.0	0.7	143	1.0	-0.6	0.8	115	2.3	-2.1	1.0	96	3.6	-3.6	0.4	95	7.3	-7.3	0.6	89	10.1	-10.1	-0.2	113	10.2	-9.4	4.0			
21	121	0.6	-0.5	0.3	90	1.5	-1.5	0.0	92	2.3	-2.3	0.1	92	4.9	-4.9	0.2	88	5.6	-5.6	-0.2	99	5.7	-5.6	0.9	114	9.9	-9.1	4.0			
22	153	0.4	-0.2	0.4	90	1.8	-1.8	0.0	86	2.6	-2.6	-0.2	80	4.1	-4.0	-0.7	113	4.4	-4.1	1.7	107	8.7	-8.3	2.6	102	13.4	-13.1	2.8			
23	52	1.6	-1.3	-1.0	98	3.0	-3.0	0.4	101	3.1	-3.0	0.6	83	3.4	-3.4	-0.4	102	4.0	-3.9	0.8	119	5.5	-4.8	2.7	104	8.8	-8.5	2.1			
24	83	1.6	-1.6	-0.2	88	3.1	-3.1	-0.1	102	2.9	-2.8	0.6	86	4.0	-4.0	-0.3	106	4.4	-4.2	1.2	119	7.3	-6.4	3.5	102	13.1	-12.8	2.8			
25	67	2.3	-2.1	-0.9	120	2.0	-1.7	1.0	90	2.0	-2.0	0.0	78	3.0	-2.9	-0.6	100	4.1	-4.0	0.7	107	7.0	-6.7	2.1	79	8.6	-8.4	-1.7			
26	180	0.7	0.0	0.7	156	2.0	-0.8	1.8	106	1.9	-1.8	0.5	97	3.3	-3.3	0.4	105	5.3	-5.1	1.4	119	6.5	-5.7	3.1	101	12.0	-11.8	2.3			
27	152	1.9	-0.9	1.7	124	1.8	-1.5	1.0	95	2.5	-2.5	0.2	89	4.0	-4.0	-0.1	90	5.0	-5.0	0.0	109	7.1	-6.7	2.3	100	11.3	-11.1	2.0			
28	203	2.1	0.8	1.9	126	2.6	-2.1	1.5	116	2.5	-2.3	1.1	102	3.8	-3.7	0.8	111	6.2	-5.8	2.2	109	8.7	-8.2	2.8	103	10.4	-10.1	2.4			
29	148	1.3	-0.7	1.1	128	2.4	-1.9	1.5	135	2.3	-1.6	1.6	91	3.9	-3.9	0.1	114	4.9	-4.5	2.0	114	9.4	-8.6	3.8	97	10.1	-10.0	1.3			
30	74	4.3	-4.1	-1.2	105	2.7	-2.6	0.7	108	2.8	-2.7	0.9	89	4.2	-4.2	-0.1	120	6.4	-5.6	3.2	110	8.5	-8.0	2.9	84	11.1	-11.0	-1.1			
31	103	3.1	-3.0	0.7	101	4.2	-4.1	0.8	109	3.6	-3.4	1.2	86	4.3	-4.3	-0.3	102	4.0	-3.9	0.8	108	7.1	-6.7	2.2	108	8.9	-8.5	2.7			

Daily Normals of Upper Air Winds (1971-2000)

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PORTBLAIR

NOVEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	110	3.8	-3.6	1.3	106	4.8	-4.6	1.3	109	3.9	-3.7	1.3	82	4.5	-4.5	-0.6	112	5.7	-5.3	2.1	114	7.0	-6.4	2.9	96	9.9	-9.8	1.0			
2	99	4.3	-4.2	0.7	103	4.4	-4.3	1.0	94	4.7	-4.7	0.3	83	4.7	-4.7	-0.6	103	4.8	-4.7	1.1	113	7.8	-7.2	3.0	101	10.2	-10.0	1.9			
3	67	2.1	-1.9	-0.8	95	3.7	-3.7	0.3	99	4.5	-4.4	0.7	86	5.8	-5.8	-0.4	98	4.9	-4.8	0.7	143	6.9	-4.2	5.5	108	11.5	-10.9	3.6			
4	103	1.3	-1.3	0.3	105	2.4	-2.3	0.6	96	2.8	-2.8	0.3	99	3.3	-3.3	0.5	104	3.8	-3.7	0.9	112	6.1	-5.7	2.3	105	11.8	-11.4	3.1			
5	113	2.3	-2.1	0.9	116	3.2	-2.9	1.4	119	2.5	-2.2	1.2	101	3.3	-3.2	0.6	118	4.1	-3.6	1.9	112	5.2	-4.8	1.9	97	9.7	-9.6	1.1			
6	96	3.7	-3.7	0.4	125	2.9	-2.4	1.7	136	2.8	-1.9	2.0	93	3.6	-3.6	0.2	114	4.3	-3.9	1.7	130	5.7	-4.4	3.7	93	6.7	-6.7	0.4			
7	67	3.4	-3.1	-1.3	118	2.6	-2.3	1.2	122	1.5	-1.3	0.8	101	3.3	-3.2	0.6	86	4.5	-4.5	-0.3	115	6.5	-5.9	2.8	92	5.6	-5.6	0.2			
8	93	3.4	-3.4	0.2	110	2.7	-2.5	0.9	103	2.6	-2.5	0.6	104	3.0	-2.9	0.7	100	5.6	-5.5	1.0	95	6.2	-6.2	0.5	91	6.1	-6.1	0.1			
9	84	4.4	-4.4	-0.5	115	3.1	-2.8	1.3	113	2.6	-2.4	1.0	86	4.2	-4.2	-0.3	97	4.7	-4.7	0.6	124	6.2	-5.1	3.5	99	5.6	-5.5	0.9			
10	106	6.3	-6.1	1.7	113	3.4	-3.1	1.3	97	3.5	-3.5	0.4	103	4.4	-4.3	1.0	92	4.6	-4.6	0.2	97	2.4	-2.4	0.3	88	7.1	-7.1	-0.3			
11	89	5.6	-5.6	-0.1	97	4.2	-4.2	0.5	101	3.3	-3.2	0.6	91	4.6	-4.6	0.1	118	4.0	-3.5	1.9	104	3.7	-3.6	0.9	117	8.0	-7.2	3.6			
12	98	4.4	-4.4	0.6	102	4.9	-4.8	1.0	102	4.0	-3.9	0.8	81	4.4	-4.3	-0.7	115	2.9	-2.6	1.2	123	4.5	-3.8	2.5	100	6.2	-6.1	1.1			
13	96	5.0	-5.0	0.5	93	5.0	-5.0	0.3	101	3.1	-3.0	0.6	93	4.0	-4.0	0.2	104	4.2	-4.1	1.0	117	3.8	-3.4	1.7	109	6.9	-6.5	2.3			
14	86	4.6	-4.6	-0.3	100	5.2	-5.1	0.9	118	4.5	-4.0	2.1	104	4.0	-3.9	1.0	91	3.9	-3.9	0.1	136	4.6	-3.2	3.3	110	5.5	-5.2	1.9			
15	83	4.6	-4.6	-0.6	99	5.1	-5.0	0.8	106	3.7	-3.6	1.0	98	3.7	-3.7	0.5	87	4.5	-4.5	-0.2	115	6.0	-5.4	2.5	63	1.6	-1.4	-0.7			
16	84	5.7	-5.7	-0.6	111	4.7	-4.4	1.7	115	4.7	-4.2	2.0	100	3.6	-3.5	0.6	120	4.4	-3.8	2.2	117	3.0	-2.7	1.4	105	3.1	-3.0	0.8			
17	74	4.5	-4.3	-1.2	109	3.4	-3.2	1.1	124	2.2	-1.8	1.2	92	3.7	-3.7	0.1	91	4.3	-4.3	0.1	143	4.1	-2.5	3.3	167	6.7	-1.5	6.5			
18	86	7.1	-7.1	-0.5	108	3.6	-3.4	1.1	90	2.0	-2.0	0.0	85	3.7	-3.7	-0.3	118	4.7	-4.1	2.2	161	4.6	-1.5	4.3	115	6.8	-6.1	2.9			
19	95	4.2	-4.2	0.4	103	3.9	-3.8	0.9	100	3.5	-3.4	0.6	88	4.7	-4.7	-0.2	123	3.7	-3.1	2.0	142	7.1	-4.4	5.6	118	7.2	-6.4	3.4			
20	83	6.0	-6.0	-0.7	94	5.1	-5.1	0.4	112	2.9	-2.7	1.1	110	5.2	-4.9	1.8	111	3.9	-3.6	1.4	152	6.9	-3.2	6.1	101	8.4	-8.2	1.6			
21	84	4.9	-4.9	-0.5	100	5.0	-4.9	0.9	91	4.1	-4.1	0.1	105	4.3	-4.2	1.1	128	3.9	-3.1	2.4	155	6.3	-2.6	5.7	91	6.1	-6.1	0.1			
22	63	4.8	-4.3	-2.2	95	5.3	-5.3	0.5	108	4.5	-4.3	1.4	102	5.2	-5.1	1.1	118	5.9	-5.2	2.8	160	8.3	-2.8	7.8	108	9.0	-8.6	2.8			
23	53	5.8	-4.6	-3.5	89	5.3	-5.3	-0.1	93	3.7	-3.7	0.2	107	5.4	-5.2	1.6	119	5.6	-4.9	2.7	169	6.5	-1.2	6.4	83	4.3	-4.3	-0.5			
24	48	5.2	-3.9	-3.5	89	5.0	-5.0	-0.1	92	3.5	-3.5	0.1	91	5.1	-5.1	0.1	77	3.7	-3.6	-0.8	160	4.6	-1.6	4.3	120	8.6	-7.4	4.3			
25	63	6.7	-6.0	-3.0	105	4.6	-4.4	1.2	108	4.0	-3.8	1.2	98	4.4	-4.4	0.6	93	3.8	-3.8	0.2	167	4.0	-0.9	3.9	88	7.6	-7.6	-0.2			
26	84	6.2	-6.2	-0.7	111	4.4	-4.1	1.6	93	3.6	-3.6	0.2	101	4.3	-4.2	0.8	119	5.2	-4.6	2.5	133	4.1	-3.0	2.8	117	3.5	-3.1	1.6			
27	96	6.2	-6.2	0.7	103	4.3	-4.2	1.0	108	3.8	-3.6	1.2	90	4.3	-4.3	0.0	123	3.5	-2.9	1.9	173	5.2	-0.6	5.2	115	7.6	-6.9	3.2			
28	103	5.4	-5.3	1.2	104	4.5	-4.4	1.1	114	3.2	-2.9	1.3	104	5.0	-4.9	1.2	138	3.1	-2.1	2.3	168	4.8	-1.0	4.7	115	8.4	-7.6	3.5			
29	105	3.0	-2.9	0.8	100	4.2	-4.1	0.7	99	3.6	-3.6	0.6	104	5.0	-4.9	1.2	126	4.7	-3.8	2.8	147	5.6	-3.1	4.7	102	10.8	-10.6	2.2			
30	99	3.8	-3.8	0.6	104	5.6	-5.4	1.3	90	4.6	-4.6	0.0	99	4.3	-4.2	0.7	129	3.8	-3.0	2.4	150	4.8	-2.4	4.2	107	6.1	-5.8	1.8			

Daily Normals of Upper Air Winds (1971-2000)

336

PORTBLAIR

DECEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	82	3.6	-3.6	-0.5	91	6.0	-6.0	0.1	95	4.8	-4.8	0.4	88	4.9	-4.9	-0.2	143	3.0	-1.8	2.4	153	6.5	-2.9	5.8	92	6.8	-6.8	0.2			
2	74	5.6	-5.4	-1.5	94	6.1	-6.1	0.4	92	5.1	-5.1	0.2	93	5.3	-5.3	0.3	133	3.5	-2.6	2.4	160	7.0	-2.4	6.6	106	5.6	-5.4	1.5			
3	76	5.0	-4.9	-1.2	89	6.3	-6.3	-0.1	88	5.1	-5.1	-0.2	87	6.5	-6.5	-0.3	117	2.8	-2.5	1.3	184	5.8	0.4	5.8	116	4.3	-3.9	1.9			
4	60	6.6	-5.7	-3.3	90	5.2	-5.2	0.0	98	4.3	-4.3	0.6	93	5.3	-5.3	0.3	126	3.7	-3.0	2.2	142	5.2	-3.2	4.1	147	5.6	-3.0	4.7			
5	67	6.1	-5.6	-2.4	86	5.2	-5.2	-0.4	92	3.8	-3.8	0.1	87	4.5	-4.5	-0.2	142	4.1	-2.5	3.2	175	5.2	-0.5	5.2	153	4.5	-2.0	4.0			
6	66	7.3	-6.7	-3.0	96	5.1	-5.1	0.5	99	3.6	-3.6	0.6	97	4.2	-4.2	0.5	145	5.1	-2.9	4.2	166	8.3	-2.0	8.1	131	5.0	-3.8	3.3			
7	95	5.8	-5.8	0.5	100	5.4	-5.3	0.9	108	3.2	-3.0	1.0	104	4.2	-4.1	1.0	144	3.7	-2.2	3.0	158	8.6	-3.2	8.0	207	0.9	0.4	0.8			
8	81	5.3	-5.2	-0.8	98	4.9	-4.8	0.7	94	3.1	-3.1	0.2	82	5.5	-5.4	-0.8	120	4.2	-3.6	2.1	170	6.8	-1.2	6.7	129	6.0	-4.7	3.8			
9	74	6.9	-6.6	-1.9	89	5.2	-5.2	-0.1	102	3.5	-3.4	0.7	93	3.9	-3.9	0.2	120	4.6	-4.0	2.3	163	4.8	-1.4	4.6	126	4.8	-3.9	2.8			
10	80	5.0	-4.9	-0.9	90	4.1	-4.1	0.0	92	3.5	-3.5	0.1	89	4.3	-4.3	-0.1	138	3.0	-2.0	2.2	163	6.5	-1.9	6.2	106	7.6	-7.3	2.1			
11	74	6.2	-6.0	-1.7	83	4.6	-4.6	-0.6	93	4.0	-4.0	0.2	84	5.0	-5.0	-0.5	107	3.4	-3.2	1.0	189	6.6	1.0	6.5	123	6.4	-5.4	3.5			
12	64	6.4	-5.7	-2.8	86	5.9	-5.9	-0.4	81	4.3	-4.2	-0.7	90	4.1	-4.1	0.0	93	3.5	-3.5	0.2	185	6.5	0.6	6.5	126	6.3	-5.1	3.7			
13	57	6.0	-5.0	-3.3	76	6.0	-5.8	-1.4	72	4.1	-3.9	-1.3	75	4.1	-4.0	-1.1	150	2.8	-1.4	2.4	158	2.7	-1.0	2.5	43	1.6	-1.1	-1.2			
14	64	7.1	-6.4	-3.1	83	6.6	-6.6	-0.8	81	3.2	-3.2	-0.5	104	4.0	-3.9	1.0	166	3.3	-0.8	3.2	199	7.1	2.3	6.7	141	5.1	-3.2	4.0			
15	65	6.8	-6.1	-2.9	89	6.5	-6.5	-0.1	98	4.5	-4.5	0.6	88	3.7	-3.7	-0.1	182	3.4	0.1	3.4	207	6.3	2.9	5.6	185	2.2	0.2	2.2			
16	56	7.7	-6.4	-4.3	82	6.9	-6.8	-1.0	101	3.6	-3.5	0.7	83	4.1	-4.1	-0.5	207	0.9	0.4	0.8	211	5.8	3.0	5.0	167	2.7	-0.6	2.6			
17	60	7.3	-6.3	-3.6	77	6.3	-6.1	-1.4	97	3.2	-3.2	0.4	89	4.0	-4.0	-0.1	189	3.2	0.5	3.2	204	9.7	3.9	8.9	126	5.7	-4.6	3.4			
18	57	6.0	-5.0	-3.3	73	5.2	-5.0	-1.5	102	2.4	-2.3	0.5	88	3.4	-3.4	-0.1	198	4.3	1.3	4.1	179	8.7	-0.2	8.7	139	2.8	-1.8	2.1			
19	64	6.1	-5.5	-2.7	80	5.7	-5.6	-1.0	81	3.2	-3.2	-0.5	77	3.5	-3.4	-0.8	219	2.7	1.7	2.1	194	8.1	1.9	7.9	161	5.9	-1.9	5.6			
20	59	5.2	-4.5	-2.7	81	5.9	-5.8	-0.9	93	3.7	-3.7	0.2	83	4.1	-4.1	-0.5	171	2.5	-0.4	2.5	194	6.1	1.5	5.9	105	2.4	-2.3	0.6			
21	55	6.4	-5.2	-3.7	83	6.2	-6.1	-0.8	84	2.8	-2.8	-0.3	47	1.9	-1.4	-1.3	204	3.9	1.6	3.6	210	9.0	4.5	7.8	128	2.8	-2.2	1.7			
22	67	6.4	-5.9	-2.5	85	5.5	-5.5	-0.5	82	2.2	-2.2	-0.3	82	2.1	-2.1	-0.3	235	3.2	2.6	1.8	220	6.0	3.9	4.6	215	1.9	1.1	1.6			
23	57	5.9	-5.0	-3.2	82	5.0	-5.0	-0.7	100	2.8	-2.8	0.5	77	2.6	-2.5	-0.6	217	4.6	2.8	3.7	214	8.0	4.5	6.6	105	3.1	-3.0	0.8			
24	65	5.3	-4.8	-2.2	91	4.7	-4.7	0.1	103	2.2	-2.1	0.5	52	1.8	-1.4	-1.1	253	3.9	3.7	1.1	218	8.0	4.9	6.3	154	5.3	-2.3	4.8			
25	73	5.9	-5.6	-1.7	84	5.7	-5.7	-0.6	107	3.4	-3.2	1.0	169	1.5	-0.3	1.5	222	4.0	2.7	3.0	227	8.1	6.0	5.5	189	9.5	1.5	9.4			
26	62	4.3	-3.8	-2.0	78	3.8	-3.7	-0.8	93	2.0	-2.0	0.1	103	2.2	-2.1	0.5	221	3.5	2.3	2.6	203	7.6	3.0	7.0	237	1.7	1.4	0.9			
27	58	5.8	-4.9	-3.1	85	3.8	-3.8	-0.3	106	2.9	-2.8	0.8	102	3.8	-3.7	0.8	172	2.2	-0.3	2.2	205	4.4	1.9	4.0	128	6.8	-5.4	4.2			
28	56	5.9	-4.9	-3.3	95	3.6	-3.6	0.3	101	2.1	-2.1	0.4	102	2.4	-2.3	0.5	175	2.4	-0.2	2.4	192	7.5	1.5	7.3	149	3.7	-1.9	3.2			
29	56	5.9	-4.9	-3.3	87	3.9	-3.9	-0.2	90	2.1	-2.1	0.0	98	2.2	-2.2	0.3	167	1.7	-0.4	1.7	210	7.2	3.6	6.2	168	4.7	-1.0	4.6			
30	55	5.6	-4.6	-3.2	86	3.2	-3.2	-0.2	98	2.1	-2.1	0.3	69	1.7	-1.6	-0.6	265	3.2	3.2	0.3	206	8.1	3.5	7.3	134	2.9	-2.1	2.0			
31	63	6.1	-5.4	-2.8	69	4.3	-4.0	-1.5	87	2.2	-2.2	-0.1	64	3.0	-2.7	-1.3	270	3.2	3.2	0.0	214	8.7	4.8	7.2	110	5.3	-5.0	1.8			

Daily Normals of Upper Air Winds (1971-2000)

RAIPUR

JANUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	16	4.0	-1.1	-3.8	323	2.5	1.5	-2.0	293	8.3	7.6	-3.3	278	18.9	18.7	-2.7	277	44.2	43.9	-5.1	260	43.6	42.9	7.8	238	16.0	13.6	8.5
2	5	2.5	-0.2	-2.5	310	3.4	2.6	-2.2	291	7.6	7.1	-2.7	276	20.4	20.3	-2.3	276	41.8	41.6	-4.4	261	47.3	46.7	7.6	282	34.0	33.3	-7.1
3	353	2.6	0.3	-2.6	334	4.9	2.1	-4.4	291	6.7	6.3	-2.4	278	15.0	14.8	-2.2	276	33.3	33.1	-3.4	250	36.9	34.6	12.8	—	—	—	—
4	22	2.7	-1.0	-2.5	342	2.9	0.9	-2.8	288	7.4	7.0	-2.3	265	15.5	15.4	1.3	279	32.5	32.1	-5.0	269	32.6	32.6	0.7	290	24.0	22.5	-8.4
5	11	2.5	-0.5	-2.5	322	2.3	1.4	-1.8	299	8.3	7.3	-4.0	274	19.4	19.4	-1.2	260	30.1	29.6	5.3	289	37.8	35.8	-12.2	269	44.0	44.0	0.8
6	6	1.8	-0.2	-1.8	318	2.7	1.8	-2.0	282	8.8	8.6	-1.8	282	20.9	20.5	-4.3	278	33.3	32.9	-4.9	283	35.0	34.1	-7.7	284	39.3	38.1	-9.5
7	312	1.5	1.1	-1.0	270	1.9	1.9	0.0	269	7.8	7.8	0.2	270	19.3	19.3	0.1	272	34.2	34.2	-0.9	273	42.7	42.6	-2.2	262	30.1	29.8	4.3
8	127	0.5	-0.4	0.3	262	2.2	2.2	0.3	271	9.5	9.5	-0.1	266	20.7	20.7	1.3	277	35.7	35.5	-4.1	266	33.0	32.9	2.3	263	30.3	30.1	3.6
9	3	1.9	-0.1	-1.9	329	3.1	1.6	-2.7	277	10.9	10.8	-1.3	272	20.3	20.3	-0.8	270	41.0	41.0	0.2	256	42.1	40.8	10.2	276	16.0	15.9	-1.7
10	32	1.9	-1.0	-1.6	263	1.7	1.7	0.2	277	8.5	8.4	-1.1	261	18.2	18.0	2.9	257	44.2	43.0	10.2	245	48.8	44.3	20.5	237	44.0	36.9	24.0
11	32	1.5	-0.8	-1.3	247	1.3	1.2	0.5	278	8.9	8.8	-1.3	265	22.0	21.9	2.0	264	44.2	43.9	4.7	245	47.6	43.3	19.8	243	30.0	26.8	13.4
12	354	0.9	0.1	-0.9	274	2.9	2.9	-0.2	263	10.4	10.3	1.3	260	21.9	21.6	3.8	254	38.5	36.9	10.9	261	50.8	50.1	8.2	—	—	—	—
13	295	2.3	2.1	-1.0	284	3.2	3.1	-0.8	277	9.6	9.5	-1.2	275	18.9	18.8	-1.5	266	39.3	39.2	2.6	263	43.7	43.4	5.5	266	27.5	27.4	1.7
14	346	1.2	0.3	-1.2	275	2.5	2.5	-0.2	275	8.9	8.9	-0.8	268	22.3	22.3	0.6	269	37.8	37.8	0.8	247	52.9	48.8	20.5	264	54.6	54.3	6.0
15	270	3.3	3.3	0.0	260	4.0	3.9	0.7	266	11.6	11.6	0.8	268	22.2	22.2	0.7	270	43.2	43.2	0.0	261	45.8	45.2	7.3	274	42.9	42.8	-3.2
16	288	2.3	2.2	-0.7	263	4.2	4.2	0.5	279	12.5	12.4	-1.9	274	24.0	24.0	-1.5	272	31.7	31.7	-1.3	269	32.2	32.2	0.7	271	18.3	18.3	-0.2
17	339	2.2	0.8	-2.1	286	4.1	3.9	-1.1	280	10.7	10.5	-1.8	282	21.5	21.0	-4.5	275	33.9	33.8	-2.7	268	32.1	32.1	0.9	264	15.2	15.1	1.6
18	336	2.2	0.9	-2.0	291	4.2	3.9	-1.5	294	9.5	8.7	-3.9	277	16.9	16.8	-2.0	270	36.5	36.5	0.3	264	38.5	38.3	4.0	219	5.4	3.4	4.2
19	349	2.5	0.5	-2.5	291	2.5	2.3	-0.9	284	10.4	10.1	-2.6	280	20.4	20.1	-3.7	279	34.0	33.6	-5.5	256	26.9	26.1	6.5	—	—	—	—
20	321	2.1	1.3	-1.6	284	3.8	3.7	-0.9	282	11.5	11.3	-2.3	281	22.2	21.8	-4.4	266	25.6	25.5	1.7	262	30.3	30.0	4.0	238	29.0	24.6	15.4
21	348	2.4	0.5	-2.3	294	4.2	3.8	-1.7	288	10.8	10.2	-3.4	279	26.0	25.7	-4.2	258	31.0	30.3	6.6	242	28.8	25.4	13.5	238	19.3	16.4	10.1
22	346	3.2	0.8	-3.1	278	4.2	4.2	-0.6	281	11.2	11.0	-2.2	277	22.9	22.8	-2.6	265	35.3	35.2	3.0	249	36.9	34.4	13.4	251	33.4	31.6	10.7
23	347	3.2	0.7	-3.1	315	4.8	3.4	-3.4	292	11.2	10.4	-4.2	282	20.5	20.0	-4.4	275	27.0	26.9	-2.3	270	27.1	27.1	0.0	260	9.7	9.6	1.7
24	351	2.5	0.4	-2.5	304	3.2	2.7	-1.8	287	8.3	7.9	-2.4	280	18.8	18.5	-3.1	282	31.1	30.4	-6.4	252	22.7	21.6	7.0	—	—	—	—
25	351	2.6	0.4	-2.6	284	2.1	2.0	-0.5	295	7.2	6.5	-3.1	273	16.6	16.6	-0.8	266	22.4	22.3	1.7	239	29.7	25.4	15.3	245	20.2	18.3	8.6
26	342	2.0	0.6	-1.9	307	3.5	2.8	-2.1	292	7.6	7.1	-2.8	273	18.6	18.6	-1.1	269	24.7	24.7	0.6	258	26.0	25.4	5.6	265	15.2	15.2	1.2
27	23	2.1	-0.8	-1.9	306	3.1	2.5	-1.8	299	7.9	6.9	-3.8	268	19.2	19.2	0.6	267	30.6	30.6	1.5	243	30.2	26.9	13.7	259	14.0	13.7	2.7
28	347	1.8	0.4	-1.8	292	4.2	3.9	-1.6	296	8.1	7.3	-3.5	278	18.7	18.5	-2.5	260	29.0	28.6	5.0	248	32.9	30.5	12.4	252	8.0	7.6	2.5
29	273	2.1	2.1	-0.1	288	2.8	2.7	-0.9	292	10.1	9.4	-3.8	278	21.7	21.5	-2.9	262	32.3	32.0	4.7	254	38.9	37.4	10.8	251	32.0	30.3	10.4
30	295	1.4	1.3	-0.6	288	4.9	4.7	-1.5	286	10.4	10.0	-2.8	283	21.0	20.5	-4.7	273	30.3	30.3	-1.5	265	39.3	39.1	3.5	249	18.3	17.1	6.4
31	293	1.5	1.4	-0.6	287	2.8	2.7	-0.8	281	10.8	10.6	-2.1	283	22.5	21.9	-5.0	275	36.1	36.0	-3.2	262	52.2	51.6	7.7	275	39.5	39.3	-3.7

Daily Normals of Upper Air Winds (1971-2000)

339

RAIPUR

MARCH

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	326	1.8	1.0	-1.5	297	4.8	4.3	-2.2	281	8.4	8.2	-1.6	280	18.3	18.0	-3.1	274	33.1	33.0	-2.1	258	36.9	36.1	7.5	274	52.0	51.9	-3.6			
2	284	2.1	2.0	-0.5	300	4.6	4.0	-2.3	278	9.0	8.9	-1.3	282	15.4	15.0	-3.3	268	36.4	36.4	1.2	274	34.4	34.3	-2.2	282	29.8	29.1	-6.2			
3	320	3.4	2.2	-2.6	299	3.3	2.9	-1.6	278	9.1	9.0	-1.3	282	18.8	18.4	-4.0	274	32.0	31.9	-2.2	262	31.8	31.5	4.3	285	19.8	19.1	-5.2			
4	301	2.3	2.0	-1.2	328	2.8	1.5	-2.4	294	8.5	7.8	-3.4	282	18.8	18.4	-3.9	269	28.0	28.0	0.3	268	34.3	34.3	1.4	261	22.8	22.5	3.6			
5	293	2.6	2.4	-1.0	297	3.4	3.0	-1.5	273	8.3	8.3	-0.4	280	18.7	18.4	-3.2	270	29.0	29.0	-0.1	261	26.7	26.4	4.1	268	11.3	11.3	0.4			
6	301	2.9	2.5	-1.5	288	4.3	4.1	-1.3	274	9.2	9.2	-0.7	276	18.9	18.8	-2.0	263	30.5	30.3	3.9	265	37.3	37.2	3.0	248	32.0	29.7	12.0			
7	350	2.9	0.5	-2.9	301	3.1	2.7	-1.6	278	8.5	8.4	-1.2	273	16.1	16.1	-0.8	270	33.1	33.1	0.2	271	35.0	35.0	-0.7	261	17.5	17.3	2.7			
8	355	1.2	0.1	-1.2	302	3.1	2.6	-1.6	275	8.8	8.8	-0.8	277	17.4	17.3	-2.2	268	29.5	29.5	1.1	266	38.8	38.7	2.4	259	30.1	29.5	6.0			
9	357	1.7	0.1	-1.7	309	2.1	1.6	-1.3	274	8.5	8.5	-0.6	272	19.0	19.0	-0.5	271	27.0	27.0	-0.6	262	31.8	31.5	4.7	276	13.8	13.7	-1.4			
10	324	1.9	1.1	-1.5	266	2.9	2.9	0.2	284	8.1	7.9	-2.0	272	16.7	16.7	-0.7	282	24.5	24.0	-5.0	270	35.7	35.7	-0.1	293	20.9	19.3	-8.1			
11	303	2.0	1.7	-1.1	278	3.5	3.5	-0.5	274	8.0	8.0	-0.6	270	17.3	17.3	-0.1	263	28.0	27.8	3.2	256	23.1	22.4	5.5	249	10.7	10.0	3.9			
12	263	3.4	3.4	0.4	265	4.8	4.8	0.4	269	9.5	9.5	0.2	278	17.2	17.0	-2.3	263	32.5	32.2	4.1	267	37.4	37.3	2.0	273	11.3	11.3	-0.6			
13	279	4.3	4.2	-0.7	278	5.1	5.1	-0.7	272	9.5	9.5	-0.4	281	17.6	17.3	-3.4	280	30.5	30.0	-5.4	274	34.4	34.3	-2.3	271	20.8	20.8	-0.5			
14	287	3.4	3.3	-1.0	283	4.9	4.8	-1.1	276	9.5	9.4	-1.0	279	16.1	15.9	-2.4	286	25.0	24.1	-6.8	288	32.1	30.5	-10.0	278	16.1	15.9	-2.2			
15	295	2.6	2.4	-1.1	283	4.1	4.0	-0.9	276	8.1	8.1	-0.9	279	15.8	15.6	-2.5	288	29.2	27.8	-8.8	276	33.2	33.0	-3.5	249	17.0	15.8	6.2			
16	303	3.3	2.8	-1.8	308	4.8	3.8	-3.0	282	8.5	8.3	-1.8	274	16.1	16.1	-1.1	276	28.3	28.2	-2.9	268	33.0	33.0	1.0	271	17.2	17.2	-0.4			
17	316	4.6	3.2	-3.3	290	4.7	4.4	-1.6	278	8.3	8.2	-1.2	281	17.5	17.2	-3.2	265	28.0	27.9	2.4	273	36.7	36.6	-2.0	272	21.9	21.9	-0.7			
18	282	4.8	4.7	-1.0	291	4.2	3.9	-1.5	275	8.0	8.0	-0.7	276	16.6	16.5	-1.6	262	30.6	30.3	4.4	271	27.8	27.8	-0.6	273	17.6	17.6	-0.8			
19	278	3.0	3.0	-0.4	288	4.9	4.7	-1.5	279	8.6	8.5	-1.3	276	16.1	16.0	-1.8	271	28.5	28.5	-0.5	272	31.1	31.1	-0.9	270	27.6	27.6	0.2			
20	292	2.9	2.7	-1.1	298	5.5	4.8	-2.6	268	9.2	9.2	0.4	277	16.5	16.4	-2.1	269	29.4	29.4	0.4	271	28.2	28.2	-0.4	273	21.9	21.9	-1.2			
21	261	3.3	3.3	0.5	296	5.2	4.7	-2.3	279	9.4	9.3	-1.4	279	14.0	13.8	-2.1	269	26.8	26.8	0.3	273	32.5	32.5	-1.6	273	17.8	17.8	-0.8			
22	266	4.8	4.8	0.3	281	5.3	5.2	-1.0	272	8.0	8.0	-0.3	273	19.0	19.0	-1.1	277	33.0	32.7	-4.1	266	40.4	40.3	2.5	294	14.1	12.8	-5.8			
23	284	3.3	3.2	-0.8	270	5.1	5.1	0.0	269	9.7	9.7	0.1	282	17.3	16.9	-3.7	274	32.2	32.1	-2.5	262	42.3	41.9	5.6	278	57.0	56.5	-7.7			
24	315	1.8	1.3	-1.3	292	4.6	4.3	-1.7	273	8.4	8.4	-0.4	272	17.3	17.3	-0.6	264	30.7	30.5	3.2	263	40.3	40.0	4.6	277	20.2	20.0	-2.5			
25	290	3.2	3.0	-1.1	293	3.3	3.0	-1.3	260	7.5	7.4	1.3	270	16.3	16.3	0.0	270	31.0	31.0	0.0	259	40.2	39.5	7.6	283	22.3	21.7	-5.2			
26	275	4.6	4.6	-0.4	295	4.7	4.2	-2.0	279	7.2	7.1	-1.1	273	15.6	15.6	-0.9	272	28.8	28.8	-0.9	269	32.9	32.9	0.4	288	18.0	17.1	-5.6			
27	332	2.6	1.2	-2.3	294	4.8	4.4	-2.0	281	8.6	8.5	-1.6	286	15.3	14.7	-4.2	282	25.3	24.8	-5.2	275	30.9	30.8	-2.9	283	19.5	19.0	-4.5			
28	283	2.2	2.1	-0.5	288	3.5	3.3	-1.1	280	6.9	6.8	-1.2	281	14.2	13.9	-2.8	274	24.7	24.6	-1.6	285	33.0	31.9	-8.5	308	13.0	10.2	-8.1			
29	333	2.5	1.1	-2.2	288	3.9	3.7	-1.2	284	7.7	7.5	-1.9	299	12.8	11.2	-6.2	292	24.2	22.5	-9.0	305	25.7	21.0	-14.8	286	12.2	11.7	-3.3			
30	306	2.6	2.1	-1.5	304	4.5	3.7	-2.5	281	7.6	7.5	-1.4	293	14.6	13.5	-5.6	280	22.3	22.0	-3.8	275	25.2	25.1	-2.0	284	21.8	21.1	-5.3			
31	53	1.5	-1.2	-0.9	322	3.6	2.2	-2.8	286	7.2	6.9	-2.0	280	12.4	12.2	-2.1	276	21.2	21.1	-2.2	279	26.6	26.3	-4.0	272	25.4	25.4	-0.8			

Daily Normals of Upper Air Winds (1971-2000)

340

RAIPUR

APRIL

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	317	2.1	1.4	-1.5	306	3.7	3.0	-2.2	283	6.2	6.0	-1.4	283	14.3	13.9	-3.2	273	20.9	20.9	-1.2	265	27.0	26.9	2.4	344	7.0	1.9	-6.7			
2	300	0.8	0.7	-0.4	293	3.6	3.3	-1.4	283	6.7	6.5	-1.5	274	15.2	15.2	-1.1	271	26.9	26.9	-0.5	264	27.0	26.8	3.0	263	21.1	20.9	2.7			
3	14	0.4	-0.1	-0.4	328	2.8	1.5	-2.4	271	6.3	6.3	-0.1	275	14.1	14.0	-1.2	270	25.3	25.3	-0.1	261	30.8	30.5	4.6	253	16.7	15.9	5.0			
4	293	1.3	1.2	-0.5	278	4.8	4.7	-0.7	281	7.2	7.1	-1.4	277	16.2	16.1	-2.1	271	27.4	27.4	-0.5	267	35.0	34.9	2.1	267	18.3	18.3	1.0			
5	264	1.8	1.8	0.2	287	4.5	4.3	-1.3	279	8.5	8.4	-1.4	282	15.6	15.2	-3.3	266	29.0	28.9	1.9	259	33.5	32.9	6.1	249	15.0	14.0	5.4			
6	291	2.6	2.4	-0.9	298	5.1	4.5	-2.4	288	8.3	7.9	-2.6	285	11.5	11.1	-3.0	280	25.0	24.6	-4.5	265	28.9	28.8	2.4	266	14.9	14.9	1.1			
7	263	4.1	4.1	0.5	278	3.5	3.5	-0.5	292	5.7	5.3	-2.1	285	11.9	11.5	-3.1	279	24.0	23.7	-3.6	273	30.9	30.9	-1.6	279	26.0	25.7	-3.9			
8	265	2.2	2.2	0.2	284	5.0	4.9	-1.2	278	7.5	7.4	-1.0	277	11.7	11.6	-1.5	265	24.7	24.6	2.1	257	28.8	28.0	6.7	160	3.0	-1.0	2.8			
9	314	3.5	2.5	-2.4	293	3.9	3.6	-1.5	261	7.3	7.2	1.2	265	14.2	14.1	1.2	261	26.1	25.8	4.1	252	35.5	33.7	11.1	177	16.0	-0.8	16.0			
10	262	4.2	4.2	0.6	289	4.6	4.4	-1.5	277	6.2	6.1	-0.8	274	13.1	13.1	-0.9	272	24.7	24.7	-1.0	266	31.2	31.1	2.4	266	25.2	25.1	1.7			
11	282	3.3	3.2	-0.7	314	3.5	2.5	-2.4	279	5.8	5.7	-0.9	278	13.1	13.0	-1.8	271	28.7	28.7	-0.7	269	29.9	29.9	0.7	267	21.8	21.8	1.2			
12	253	2.8	2.7	0.8	274	3.2	3.2	-0.2	286	5.0	4.8	-1.4	274	14.4	14.4	-1.0	275	27.7	27.6	-2.4	261	32.3	31.9	5.2	246	15.0	13.7	6.2			
13	331	2.1	1.0	-1.8	301	4.2	3.6	-2.2	278	5.3	5.3	-0.7	279	11.8	11.7	-1.8	260	23.9	23.5	4.1	256	25.4	24.7	6.0	265	15.9	15.8	1.4			
14	288	0.9	0.9	-0.3	313	3.8	2.8	-2.6	266	4.6	4.6	0.3	269	12.7	12.7	0.3	259	25.6	25.1	5.0	259	35.1	34.5	6.7	261	19.9	19.7	3.1			
15	219	2.1	1.3	1.6	284	4.0	3.9	-1.0	271	5.4	5.4	-0.1	266	11.8	11.8	0.9	261	25.1	24.8	4.0	256	30.6	29.7	7.5	282	20.0	19.6	-4.0			
16	305	1.6	1.3	-0.9	279	4.0	4.0	-0.6	272	8.1	8.1	-0.3	268	11.7	11.7	0.4	263	24.3	24.1	3.1	252	28.5	27.0	9.0	256	12.9	12.5	3.2			
17	289	3.1	2.9	-1.0	267	3.5	3.5	0.2	285	6.5	6.3	-1.7	274	12.0	12.0	-0.8	258	25.5	24.9	5.3	248	32.8	30.4	12.4	287	24.4	23.3	-7.1			
18	313	1.9	1.4	-1.3	295	4.0	3.6	-1.7	287	5.6	5.4	-1.6	287	9.9	9.5	-2.9	257	20.4	19.9	4.6	251	27.5	26.0	9.1	281	17.4	17.1	-3.2			
19	344	1.5	0.4	-1.4	332	3.4	1.6	-3.0	295	3.8	3.5	-1.6	284	11.1	10.8	-2.7	258	21.2	20.8	4.3	246	27.2	24.8	11.1	209	7.2	3.5	6.3			
20	201	1.4	0.5	1.3	317	3.7	2.5	-2.7	291	5.0	4.7	-1.8	283	10.2	9.9	-2.3	266	21.6	21.6	1.4	260	28.3	27.8	5.1	263	10.9	10.8	1.4			
21	265	2.4	2.4	0.2	308	4.1	3.2	-2.5	307	8.0	6.4	-4.8	286	8.0	7.7	-2.2	252	20.0	19.0	6.3	263	30.1	29.9	3.7	260	16.5	16.2	2.9			
22	276	3.0	3.0	-0.3	312	4.8	3.6	-3.2	297	6.1	5.4	-2.8	283	11.2	10.9	-2.6	270	23.6	23.6	-0.2	265	31.9	31.8	2.9	222	5.2	3.5	3.9			
23	257	4.3	4.2	1.0	268	4.9	4.9	0.2	286	7.0	6.7	-1.9	280	9.9	9.8	-1.7	269	25.5	25.5	0.4	257	25.8	25.2	5.7	246	10.1	9.2	4.1			
24	246	5.1	4.7	2.1	264	6.9	6.9	0.7	296	6.8	6.1	-3.0	293	11.9	10.9	-4.7	268	21.3	21.3	0.9	271	24.3	24.3	-0.6	263	11.8	11.7	1.5			
25	202	3.8	1.4	3.5	271	4.0	4.0	-0.1	290	6.6	6.2	-2.2	297	10.4	9.3	-4.7	271	21.2	21.2	-0.4	261	26.2	25.8	4.3	261	7.8	7.7	1.2			
26	282	3.0	2.9	-0.6	280	3.9	3.8	-0.7	297	7.2	6.4	-3.2	298	10.4	9.2	-4.8	284	18.0	17.5	-4.4	259	21.7	21.3	4.3	262	9.0	8.9	1.3			
27	288	1.6	1.5	-0.5	316	3.3	2.3	-2.4	297	6.6	5.9	-3.0	292	10.7	9.9	-4.1	282	20.1	19.7	-4.2	251	26.1	24.6	8.6	265	9.8	9.8	0.8			
28	305	3.7	3.0	-2.1	307	4.8	3.8	-2.9	284	7.2	7.0	-1.8	291	9.3	8.7	-3.3	271	20.1	20.1	-0.3	252	23.1	22.0	7.1	256	9.7	9.4	2.3			
29	298	3.0	2.6	-1.4	317	5.4	3.7	-3.9	310	6.8	5.2	-4.4	296	12.0	10.8	-5.3	288	17.8	16.9	-5.6	264	30.2	30.0	3.2	310	8.0	6.1	-5.1			
30	310	3.8	2.9	-2.4	316	4.0	2.8	-2.9	301	6.0	5.1	-3.1	304	9.3	7.7	-5.2	276	20.5	20.4	-2.1	256	19.6	19.0	4.7	212	3.8	2.0	3.2			

Daily Normals of Upper Air Winds (1971-2000)

RAIPUR

MAY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	277	4.2	4.2	-0.5	292	4.8	4.4	-1.8	302	4.9	4.1	-2.6	296	8.5	7.6	-3.7	261	18.6	18.4	2.9	252	18.1	17.2	5.6	225	7.9	5.6	5.6			
2	282	3.5	3.4	-0.7	295	3.8	3.5	-1.6	301	3.5	3.0	-1.8	290	9.6	9.0	-3.2	260	20.2	19.9	3.6	257	19.7	19.2	4.4	275	4.3	4.3	-0.4			
3	263	1.7	1.7	0.2	305	3.7	3.0	-2.1	299	6.5	5.7	-3.1	282	9.0	8.8	-1.9	254	16.5	15.9	4.5	255	17.5	16.9	4.4	186	4.7	0.5	4.7			
4	292	2.4	2.2	-0.9	311	3.8	2.9	-2.5	290	7.2	6.7	-2.5	281	10.1	9.9	-1.9	259	18.1	17.8	3.3	260	21.7	21.4	3.6	250	7.7	7.2	2.6			
5	360	3.2	0.0	-3.2	327	3.8	2.1	-3.2	303	5.7	4.8	-3.1	288	11.6	11.1	-3.5	256	18.8	18.3	4.4	248	20.5	19.0	7.6	299	2.3	2.0	-1.1			
6	299	2.1	1.8	-1.0	303	3.8	3.2	-2.1	308	5.5	4.3	-3.4	293	8.6	7.9	-3.3	258	17.9	17.5	3.8	254	22.2	21.3	6.3	317	5.2	3.5	-3.8			
7	297	3.7	3.3	-1.7	295	4.7	4.3	-2.0	288	6.6	6.3	-2.0	285	7.2	6.9	-1.9	256	14.2	13.8	3.5	234	21.0	17.1	12.2	261	7.3	7.2	1.1			
8	314	2.8	2.0	-1.9	302	4.1	3.5	-2.2	285	6.0	5.8	-1.6	280	7.9	7.8	-1.4	264	16.4	16.3	1.6	259	22.2	21.8	4.1	244	9.0	8.1	3.9			
9	244	3.9	3.5	1.7	272	4.8	4.8	-0.2	294	6.2	5.7	-2.5	285	10.5	10.1	-2.7	264	19.9	19.8	2.0	256	20.4	19.8	4.9	8	3.4	-0.5	-3.4			
10	266	1.6	1.6	0.1	286	4.1	3.9	-1.1	288	5.2	4.9	-1.6	279	10.4	10.3	-1.6	264	18.6	18.5	1.9	250	21.5	20.3	7.2	242	8.5	7.5	4.0			
11	332	3.6	1.7	-3.2	341	2.4	0.8	-2.3	274	5.1	5.1	-0.4	282	10.7	10.4	-2.3	262	19.2	19.0	2.7	253	23.2	22.1	6.9	254	9.7	9.3	2.6			
12	295	2.1	1.9	-0.9	298	3.4	3.0	-1.6	304	3.6	3.0	-2.0	298	8.4	7.4	-3.9	272	17.6	17.6	-0.7	263	17.4	17.3	2.2	101	4.4	-4.3	0.8			
13	310	2.6	2.0	-1.7	299	4.1	3.6	-2.0	307	5.0	4.0	-3.0	304	8.9	7.4	-4.9	269	13.5	13.5	0.3	267	10.9	10.9	0.6	224	6.4	4.4	4.6			
14	245	3.1	2.8	1.3	297	3.7	3.3	-1.7	323	5.4	3.2	-4.3	299	8.1	7.1	-4.0	261	12.4	12.3	1.9	248	11.8	10.9	4.5	92	3.4	-3.4	0.1			
15	267	5.5	5.5	0.3	290	4.9	4.6	-1.7	309	5.4	4.2	-3.4	313	8.2	6.0	-5.6	265	12.0	12.0	1.0	264	11.7	11.6	1.2	82	8.8	-8.7	-1.3			
16	275	4.7	4.7	-0.4	287	5.0	4.8	-1.5	307	8.4	6.7	-5.0	299	11.0	9.6	-5.4	267	11.6	11.6	0.7	250	11.7	11.0	4.1	127	5.0	-4.0	3.0			
17	296	3.9	3.5	-1.7	307	5.5	4.4	-3.3	293	7.3	6.7	-2.9	290	10.3	9.7	-3.6	275	15.5	15.4	-1.4	261	13.4	13.2	2.2	346	4.9	1.2	-4.8			
18	299	4.5	3.9	-2.2	306	4.6	3.7	-2.7	313	6.3	4.6	-4.3	294	7.2	6.6	-3.0	266	13.1	13.1	1.0	263	4.6	4.6	0.6	86	10.6	-10.6	-0.8			
19	284	4.9	4.7	-1.2	282	4.9	4.8	-1.0	308	6.3	5.0	-3.9	288	8.5	8.1	-2.6	269	14.3	14.3	0.2	241	18.8	16.5	9.0	45	1.1	-0.8	-0.8			
20	257	2.6	2.5	0.6	298	3.6	3.2	-1.7	312	5.9	4.4	-4.0	295	8.1	7.3	-3.4	257	10.2	9.9	2.3	230	16.0	12.2	10.3	237	3.8	3.2	2.1			
21	266	3.9	3.9	0.3	285	4.2	4.1	-1.1	323	6.6	4.0	-5.3	297	8.8	7.8	-4.0	243	9.7	8.7	4.4	228	6.2	4.6	4.2	93	8.6	-8.6	0.5			
22	290	4.1	3.9	-1.4	307	4.5	3.6	-2.7	320	7.1	4.6	-5.4	301	8.7	7.4	-4.5	257	11.7	11.4	2.6	231	15.6	12.1	9.8	135	5.4	-3.8	3.8			
23	302	3.8	3.2	-2.0	324	5.2	3.1	-4.2	323	5.5	3.3	-4.4	312	7.4	5.5	-4.9	268	7.6	7.6	0.3	221	10.8	7.1	8.1	117	9.2	-8.2	4.2			
24	295	2.1	1.9	-0.9	329	4.2	2.2	-3.6	309	5.7	4.4	-3.6	313	7.9	5.8	-5.4	259	8.6	8.4	1.6	222	11.1	7.5	8.2	124	8.5	-7.0	4.8			
25	234	3.1	2.5	1.8	311	3.8	2.9	-2.5	318	5.8	3.9	-4.3	318	7.6	5.1	-5.6	266	5.2	5.2	0.4	236	8.0	6.6	4.5	98	10.9	-10.8	1.6			
26	262	2.9	2.9	0.4	313	4.1	3.0	-2.8	327	5.9	3.2	-4.9	332	6.1	2.9	-5.4	261	8.5	8.4	1.4	229	9.4	7.1	6.1	149	8.2	-4.2	7.1			
27	252	4.7	4.5	1.5	296	4.9	4.4	-2.1	323	6.9	4.2	-5.5	319	6.5	4.3	-4.9	261	7.2	7.1	1.1	221	6.4	4.2	4.8	120	11.6	-10.1	5.8			
28	259	4.9	4.8	0.9	298	4.7	4.2	-2.2	314	6.3	4.5	-4.4	314	7.4	5.3	-5.2	248	7.2	6.7	2.7	220	6.4	4.1	4.9	102	16.1	-15.7	3.4			
29	270	4.1	4.1	0.0	302	3.6	3.0	-1.9	320	5.1	3.3	-3.9	311	6.9	5.2	-4.5	248	9.1	8.4	3.4	217	11.0	6.6	8.8	131	14.0	-10.6	9.1			
30	254	3.7	3.6	1.0	287	3.9	3.7	-1.1	312	4.7	3.5	-3.1	292	5.3	4.9	-2.0	248	8.2	7.6	3.1	212	9.1	4.8	7.7	106	8.5	-8.2	2.3			
31	276	3.9	3.9	-0.4	311	4.0	3.0	-2.6	313	4.9	3.6	-3.3	292	7.4	6.8	-2.8	256	8.9	8.6	2.2	213	11.1	6.0	9.3	124	10.3	-8.5	5.8			

Daily Normals of Upper Air Winds (1971-2000)

342

RAIPUR

JUNE

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	322	3.6	2.2	-2.8	309	3.6	2.8	-2.3	308	4.9	3.9	-3.0	282	7.2	7.0	-1.5	239	9.7	8.3	5.0	203	11.4	4.5	10.5	142	10.3	-6.4	8.1			
2	297	4.0	3.6	-1.8	319	5.5	3.6	-4.2	311	5.7	4.3	-3.8	301	6.6	5.7	-3.4	247	5.3	4.9	2.1	223	7.5	5.1	5.5	132	10.8	-8.1	7.2			
3	338	3.5	1.3	-3.2	352	5.7	0.8	-5.6	332	6.2	2.9	-5.5	306	4.8	3.9	-2.8	213	3.5	1.9	2.9	171	6.7	-1.1	6.6	147	9.0	-4.9	7.5			
4	291	3.1	2.9	-1.1	326	5.8	3.2	-4.8	344	5.3	1.5	-5.1	320	3.9	2.5	-3.0	225	0.8	0.6	0.6	167	6.1	-1.4	5.9	107	17.8	-17.1	5.1			
5	287	1.0	1.0	-0.3	327	2.4	1.3	-2.0	325	4.4	2.5	-3.6	305	4.4	3.6	-2.5	231	5.8	4.5	3.6	151	7.1	-3.4	6.2	111	11.5	-10.7	4.2			
6	268	3.3	3.3	0.1	303	4.6	3.9	-2.5	322	5.5	3.4	-4.3	318	5.4	3.6	-4.0	248	4.5	4.2	1.7	157	6.3	-2.5	5.8	107	17.4	-16.6	5.1			
7	267	3.3	3.3	0.2	289	3.9	3.7	-1.3	310	4.3	3.3	-2.8	294	6.4	5.9	-2.6	241	2.9	2.5	1.4	116	5.1	-4.6	2.2	86	17.7	-17.7	-1.3			
8	229	6.8	5.1	4.5	284	3.8	3.7	-0.9	315	4.7	3.3	-3.3	283	5.7	5.5	-1.3	310	3.0	2.3	-1.9	133	6.8	-5.0	4.6	80	17.2	-17.0	-2.9			
9	267	6.6	6.6	0.4	292	6.1	5.6	-2.3	314	6.3	4.5	-4.4	296	5.2	4.7	-2.3	32	5.1	-2.7	-4.3	93	6.4	-6.4	0.3	101	16.7	-16.4	3.1			
10	240	4.8	4.2	2.4	290	4.4	4.1	-1.5	329	5.7	2.9	-4.9	304	5.9	4.9	-3.3	24	1.0	-0.4	-0.9	107	6.9	-6.6	2.0	87	18.6	-18.6	-0.9			
11	222	3.1	2.1	2.3	270	4.1	4.1	0.0	332	6.0	2.8	-5.3	321	5.7	3.6	-4.4	71	4.2	-4.0	-1.4	73	2.4	-2.3	-0.7	88	25.2	-25.2	-0.8			
12	235	2.8	2.3	1.6	291	3.6	3.4	-1.3	337	5.8	2.3	-5.3	302	2.6	2.2	-1.4	87	1.7	-1.7	-0.1	120	8.6	-7.4	4.3	109	15.7	-14.8	5.2			
13	258	1.4	1.4	0.3	336	2.4	1.0	-2.2	355	3.2	0.3	-3.2	317	2.2	1.5	-1.6	82	3.5	-3.5	-0.5	102	7.8	-7.6	1.6	104	13.2	-12.8	3.1			
14	29	1.3	-0.6	-1.1	11	3.1	-0.6	-3.0	22	5.7	-2.1	-5.3	329	2.6	1.3	-2.2	99	2.6	-2.6	0.4	98	4.2	-4.2	0.6	81	17.4	-17.2	-2.8			
15	220	5.2	3.3	4.0	291	0.9	0.8	-0.3	357	3.3	0.2	-3.3	308	1.8	1.4	-1.1	100	2.8	-2.8	0.5	102	9.7	-9.5	2.1	91	18.0	-18.0	0.3			
16	241	2.6	2.3	1.3	282	3.0	2.9	-0.6	317	2.2	1.5	-1.6	309	2.6	2.0	-1.6	74	2.6	-2.5	-0.7	92	5.2	-5.2	0.2	77	16.4	-16.0	-3.7			
17	244	3.7	3.3	1.6	256	3.7	3.6	0.9	328	4.9	2.6	-4.1	13	5.1	-1.2	-5.0	115	4.4	-4.0	1.9	73	7.5	-7.2	-2.2	98	19.9	-19.7	2.9			
18	265	4.8	4.8	0.4	297	5.1	4.5	-2.3	317	4.7	3.2	-3.4	9	1.8	-0.3	-1.8	56	5.0	-4.1	-2.8	90	8.0	-8.0	0.0	90	20.3	-20.3	0.1			
19	248	6.4	5.9	2.4	269	5.1	5.1	0.1	303	3.8	3.2	-2.1	276	2.9	2.9	-0.3	63	3.1	-2.8	-1.4	80	10.9	-10.7	-1.8	82	22.8	-22.6	-3.1			
20	244	7.1	6.4	3.1	272	5.9	5.9	-0.2	302	3.4	2.9	-1.8	289	3.6	3.4	-1.2	53	5.4	-4.3	-3.2	86	13.2	-13.2	-1.0	77	23.8	-23.2	-5.3			
21	271	6.4	6.4	-0.1	302	6.1	5.2	-3.2	327	6.4	3.5	-5.3	340	6.3	2.1	-5.9	49	6.4	-4.8	-4.2	92	7.8	-7.8	0.3	107	10.5	-10.1	3.0			
22	264	6.8	6.8	0.7	291	7.1	6.6	-2.5	335	5.3	2.2	-4.8	345	4.1	1.1	-4.0	56	4.3	-3.6	-2.4	93	10.4	-10.4	0.5	88	23.5	-23.5	-0.8			
23	260	4.7	4.6	0.8	277	5.4	5.4	-0.7	318	4.7	3.1	-3.5	288	1.9	1.8	-0.6	121	5.5	-4.7	2.8	111	10.1	-9.4	3.7	80	13.2	-13.0	-2.3			
24	269	5.4	5.4	0.1	285	4.6	4.4	-1.2	320	5.2	3.4	-4.0	292	3.2	3.0	-1.2	81	4.0	-4.0	-0.6	109	13.3	-12.6	4.4	98	26.5	-26.2	3.8			
25	257	5.1	5.0	1.2	280	5.0	4.9	-0.9	319	5.6	3.7	-4.2	295	3.8	3.5	-1.6	81	4.4	-4.3	-0.7	103	17.6	-17.1	4.1	—	—	—	—			
26	269	6.4	6.4	0.1	281	6.3	6.2	-1.2	315	4.9	3.5	-3.5	8	2.7	-0.4	-2.7	91	8.3	-8.3	0.2	86	17.1	-17.1	-1.2	85	27.9	-27.8	-2.3			
27	257	6.1	5.9	1.4	283	3.6	3.5	-0.8	329	4.2	2.2	-3.6	42	3.0	-2.0	-2.2	97	8.6	-8.5	1.0	90	12.3	-12.3	-0.1	81	21.4	-21.1	-3.5			
28	250	6.3	5.9	2.2	271	5.7	5.7	-0.1	308	3.6	2.8	-2.2	274	1.3	1.3	-0.1	115	6.3	-5.7	2.6	78	12.4	-12.1	-2.6	71	27.3	-25.8	-8.9			
29	243	3.6	3.2	1.6	270	5.0	5.0	0.0	298	4.9	4.3	-2.3	292	1.6	1.5	-0.6	94	5.4	-5.4	0.4	91	15.2	-15.2	0.3	71	26.1	-24.7	-8.5			
30	262	3.6	3.6	0.5	283	4.3	4.2	-1.0	292	5.1	4.7	-1.9	313	1.9	1.4	-1.3	111	6.4	-6.0	2.3	95	12.7	-12.7	1.1	77	27.1	-26.4	-6.1			

Daily Normals of Upper Air Winds (1971-2000)

RAIPUR

JULY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	243	3.9	3.5	1.8	289	5.3	5.0	-1.7	304	4.3	3.6	-2.4	308	4.4	3.5	-2.7	67	6.5	-6.0	-2.6	84	13.1	-13.0	-1.3	74	31.0	-29.8	-8.7			
2	243	4.5	4.0	2.0	271	4.4	4.4	-0.1	309	4.5	3.5	-2.8	331	2.3	1.1	-2.0	99	6.5	-6.4	1.0	87	17.1	-17.1	-0.8	74	19.8	-19.0	-5.5			
3	239	4.2	3.6	2.2	263	4.2	4.2	0.5	299	3.5	3.1	-1.7	320	2.6	1.7	-2.0	79	6.0	-5.9	-1.2	92	13.5	-13.5	0.4	81	28.8	-28.4	-4.5			
4	244	6.2	5.6	2.7	275	4.2	4.2	-0.4	296	4.1	3.7	-1.8	348	1.9	0.4	-1.9	103	6.5	-6.3	1.4	76	16.8	-16.3	-4.0	73	30.6	-29.3	-8.9			
5	250	5.2	4.9	1.8	274	4.9	4.9	-0.3	310	5.2	4.0	-3.3	348	2.4	0.5	-2.3	56	3.4	-2.8	-1.9	80	14.3	-14.1	-2.4	89	25.1	-25.1	-0.5			
6	254	4.6	4.4	1.3	281	5.4	5.3	-1.0	299	3.7	3.2	-1.8	324	1.4	0.8	-1.1	70	6.3	-5.9	-2.2	100	12.3	-12.1	2.1	96	22.9	-22.8	2.5			
7	270	6.1	6.1	0.0	276	5.3	5.3	-0.6	267	3.5	3.5	0.2	12	2.4	-0.5	-2.3	94	7.9	-7.9	0.5	99	21.4	-21.1	3.4	82	29.8	-29.5	-4.2			
8	244	3.2	2.9	1.4	280	2.3	2.3	-0.4	275	1.2	1.2	-0.1	233	0.5	0.4	0.3	99	8.4	-8.3	1.3	95	16.6	-16.5	1.3	76	27.8	-27.0	-6.6			
9	236	5.0	4.1	2.8	278	3.6	3.6	-0.5	287	2.7	2.6	-0.8	292	0.5	0.5	-0.2	61	6.0	-5.3	-2.9	87	19.2	-19.2	-1.0	73	29.5	-28.2	-8.5			
10	262	3.6	3.6	0.5	278	3.6	3.6	-0.5	301	3.1	2.7	-1.6	284	0.8	0.8	-0.2	98	5.3	-5.3	0.7	83	18.7	-18.6	-2.3	75	30.3	-29.3	-7.6			
11	256	6.4	6.2	1.6	301	3.7	3.2	-1.9	325	3.5	2.0	-2.9	333	0.4	0.2	-0.4	92	7.7	-7.7	0.3	87	20.2	-20.2	-1.2	85	32.0	-31.9	-2.7			
12	235	7.5	6.1	4.3	268	4.9	4.9	0.2	299	3.5	3.1	-1.7	333	0.7	0.3	-0.6	87	5.5	-5.5	-0.3	81	13.9	-13.7	-2.1	94	27.5	-27.4	2.0			
13	239	6.8	5.8	3.5	261	5.0	4.9	0.8	278	2.8	2.8	-0.4	220	1.6	1.0	1.2	84	6.6	-6.6	-0.7	78	16.4	-16.0	-3.5	73	30.1	-28.8	-8.8			
14	258	4.2	4.1	0.9	260	4.1	4.0	0.7	275	3.6	3.6	-0.3	304	1.1	0.9	-0.6	104	8.1	-7.9	1.9	83	14.1	-14.0	-1.8	84	27.7	-27.6	-2.7			
15	271	6.0	6.0	-0.1	279	5.7	5.6	-0.9	286	3.6	3.5	-1.0	66	1.7	-1.6	-0.7	88	9.4	-9.4	-0.4	94	17.2	-17.2	1.2	88	29.3	-29.3	-0.9			
16	254	5.5	5.3	1.5	277	3.8	3.8	-0.5	301	3.3	2.8	-1.7	71	2.1	-2.0	-0.7	83	10.1	-10.0	-1.2	85	16.0	-15.9	-1.4	80	29.8	-29.3	-5.2			
17	253	6.8	6.5	2.0	276	5.1	5.1	-0.5	285	2.3	2.2	-0.6	57	3.0	-2.5	-1.6	82	9.8	-9.7	-1.3	90	19.2	-19.2	0.0	98	29.0	-28.7	3.9			
18	243	6.6	5.9	3.0	258	5.5	5.4	1.1	282	3.8	3.7	-0.8	69	1.4	-1.3	-0.5	86	9.2	-9.2	-0.7	79	20.9	-20.5	-3.9	76	28.0	-27.1	-6.9			
19	246	7.9	7.2	3.2	290	5.2	4.9	-1.8	284	4.4	4.3	-1.1	339	1.4	0.5	-1.3	87	7.3	-7.3	-0.4	92	17.5	-17.5	0.5	62	23.3	-20.6	-10.9			
20	258	7.0	6.8	1.5	282	5.9	5.8	-1.2	286	3.3	3.2	-0.9	99	1.8	-1.8	0.3	81	8.7	-8.6	-1.3	79	18.7	-18.4	-3.6	83	26.4	-26.2	-3.0			
21	259	7.0	6.9	1.4	270	4.4	4.4	0.0	311	2.1	1.6	-1.4	100	2.2	-2.2	0.4	87	7.9	-7.9	-0.4	78	14.1	-13.8	-3.0	69	23.6	-22.1	-8.4			
22	271	8.1	8.1	-0.2	296	5.9	5.3	-2.6	342	2.2	0.7	-2.1	29	1.0	-0.5	-0.9	92	8.2	-8.2	0.3	85	15.5	-15.4	-1.4	74	27.5	-26.4	-7.7			
23	263	7.7	7.6	1.0	282	3.9	3.8	-0.8	311	2.1	1.6	-1.4	62	1.5	-1.3	-0.7	74	5.8	-5.6	-1.6	87	15.6	-15.6	-0.9	87	25.0	-25.0	-1.3			
24	267	7.2	7.2	0.4	262	6.4	6.3	0.9	257	4.4	4.3	1.0	189	3.1	0.5	3.1	89	8.6	-8.6	-0.2	82	16.0	-15.8	-2.3	79	28.6	-28.1	-5.3			
25	261	8.0	7.9	1.2	270	6.5	6.5	0.0	259	5.7	5.6	1.1	297	0.4	0.4	-0.2	72	9.8	-9.3	-3.1	80	16.0	-15.8	-2.7	77	29.0	-28.3	-6.5			
26	255	7.9	7.6	2.1	260	8.0	7.9	1.4	282	5.2	5.1	-1.1	273	2.0	2.0	-0.1	80	7.0	-6.9	-1.2	74	16.1	-15.5	-4.4	78	30.8	-30.2	-6.2			
27	266	7.0	7.0	0.5	285	6.8	6.6	-1.8	292	5.8	5.4	-2.2	257	2.2	2.1	0.5	90	10.3	-10.3	0.0	89	15.6	-15.6	-0.4	83	33.3	-33.1	-3.9			
28	268	4.9	4.9	0.2	286	4.8	4.6	-1.3	315	2.7	1.9	-1.9	79	3.8	-3.7	-0.7	88	9.5	-9.5	-0.4	85	18.8	-18.7	-1.8	84	40.8	-40.6	-4.4			
29	260	5.8	5.7	1.0	284	6.6	6.4	-1.6	300	3.6	3.1	-1.8	90	1.2	-1.2	0.0	106	9.6	-9.2	2.6	90	19.3	-19.3	-0.1	74	33.5	-32.3	-9.0			
30	261	5.0	4.9	0.8	268	5.5	5.5	0.2	270	5.1	5.1	0.0	105	2.4	-2.3	0.6	84	10.0	-10.0	-1.0	91	17.4	-17.4	0.3	87	33.0	-32.9	-1.9			
31	260	5.6	5.5	1.0	284	5.6	5.4	-1.3	304	3.6	3.0	-2.0	304	3.6	3.0	-2.0	86	7.7	-7.7	-0.5	76	21.4	-20.8	-5.1	100	36.1	-35.5	6.3			

Daily Normals of Upper Air Winds (1971-2000)

RAIPUR

AUGUST

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	293	3.6	3.3	-1.4	293	4.9	4.5	-1.9	299	3.3	2.9	-1.6	66	1.7	-1.6	-0.7	93	8.3	-8.3	0.5	68	15.5	-14.3	-5.9	62	31.0	-27.4	-14.6			
2	251	5.0	4.7	1.6	276	4.1	4.1	-0.4	311	3.0	2.3	-2.0	67	5.0	-4.6	-2.0	82	8.7	-8.6	-1.2	87	17.2	-17.2	-1.0	74	29.5	-28.4	-8.1			
3	253	7.9	7.6	2.3	292	4.8	4.5	-1.8	323	2.5	1.5	-2.0	310	1.7	1.3	-1.1	71	9.9	-9.4	-3.2	79	15.5	-15.2	-3.0	85	26.1	-26.0	-2.1			
4	259	8.6	8.4	1.7	272	4.9	4.9	-0.2	284	3.2	3.1	-0.8	79	1.6	-1.6	-0.3	89	5.5	-5.5	-0.1	74	13.8	-13.2	-3.9	84	25.6	-25.5	-2.7			
5	237	6.7	5.6	3.7	288	5.9	5.6	-1.8	280	5.9	5.8	-1.0	331	2.3	1.1	-2.0	68	7.5	-7.0	-2.8	67	11.0	-10.1	-4.3	79	25.3	-24.9	-4.7			
6	251	7.5	7.1	2.4	287	4.8	4.6	-1.4	319	3.0	2.0	-2.3	39	2.1	-1.3	-1.6	76	10.5	-10.2	-2.6	78	15.1	-14.8	-3.1	82	35.0	-34.6	-5.1			
7	255	6.7	6.5	1.8	293	4.6	4.2	-1.8	52	2.9	-2.3	-1.8	94	4.5	-4.5	0.3	83	11.0	-10.9	-1.3	91	18.4	-18.4	0.4	78	35.5	-34.8	-7.2			
8	269	6.3	6.3	0.1	339	2.8	1.0	-2.6	41	3.2	-2.1	-2.4	77	5.9	-5.8	-1.3	94	12.5	-12.5	0.8	99	18.6	-18.4	2.8	81	28.9	-28.6	-4.3			
9	242	4.7	4.2	2.2	225	2.5	1.8	1.8	201	1.9	0.7	1.8	156	4.2	-1.7	3.8	104	10.5	-10.2	2.5	87	16.5	-16.5	-0.9	99	32.8	-32.4	5.2			
10	266	1.6	1.6	0.1	259	2.5	2.5	0.5	259	1.0	1.0	0.2	120	3.4	-3.0	1.7	93	9.8	-9.8	0.5	93	20.4	-20.4	1.0	76	28.3	-27.5	-6.8			
11	234	3.9	3.2	2.3	265	3.2	3.2	0.3	300	1.4	1.2	-0.7	117	3.1	-2.8	1.4	85	9.0	-9.0	-0.8	91	16.7	-16.7	0.3	80	27.5	-27.0	-5.0			
12	235	5.1	4.2	2.9	295	3.1	2.8	-1.3	306	2.7	2.2	-1.6	62	2.1	-1.9	-1.0	78	8.4	-8.2	-1.8	74	12.5	-12.0	-3.4	81	26.8	-26.4	-4.4			
13	250	6.2	5.8	2.1	292	3.5	3.2	-1.3	286	4.7	4.5	-1.3	319	2.0	1.3	-1.5	84	5.0	-5.0	-0.5	83	13.5	-13.4	-1.7	75	23.9	-23.1	-6.2			
14	258	5.6	5.5	1.2	283	3.7	3.6	-0.8	307	3.0	2.4	-1.8	337	0.8	0.3	-0.7	78	4.0	-3.9	-0.8	106	11.5	-11.0	3.2	—	—	—	—			
15	277	3.9	3.9	-0.5	321	2.7	1.7	-2.1	360	3.2	0.0	-3.2	58	1.5	-1.3	-0.8	74	7.1	-6.8	-1.9	81	15.3	-15.1	-2.4	92	28.0	-28.0	1.0			
16	246	3.9	3.6	1.6	315	2.0	1.4	-1.4	348	2.4	0.5	-2.3	71	3.6	-3.4	-1.2	90	8.0	-8.0	0.0	86	17.4	-17.4	-1.1	78	34.0	-33.3	-7.1			
17	299	3.5	3.1	-1.7	336	1.7	0.7	-1.6	40	2.3	-1.5	-1.8	105	3.8	-3.7	1.0	84	8.0	-7.9	-0.9	88	18.5	-18.5	-0.5	83	34.7	-34.4	-4.2			
18	272	4.8	4.8	-0.2	294	2.4	2.2	-1.0	43	1.8	-1.2	-1.3	37	3.5	-2.1	-2.8	84	10.5	-10.4	-1.1	79	16.6	-16.3	-3.3	80	31.0	-30.5	-5.5			
19	246	4.7	4.3	1.9	266	2.8	2.8	0.2	255	1.1	1.1	0.3	102	4.9	-4.8	1.0	78	8.4	-8.2	-1.7	91	19.6	-19.6	0.3	84	25.0	-24.9	-2.6			
20	250	3.0	2.8	1.0	302	2.5	2.1	-1.3	35	1.2	-0.7	-1.0	116	2.8	-2.5	1.2	83	7.7	-7.6	-1.0	85	16.8	-16.7	-1.6	70	30.3	-28.4	-10.5			
21	249	3.4	3.2	1.2	303	2.7	2.3	-1.5	323	1.5	0.9	-1.2	198	1.3	0.4	1.2	75	5.4	-5.2	-1.4	90	14.8	-14.8	0.0	74	26.1	-25.1	-7.0			
22	288	0.9	0.9	-0.3	287	1.0	1.0	-0.3	354	0.9	0.1	-0.9	104	3.7	-3.6	0.9	83	8.9	-8.8	-1.1	81	15.6	-15.4	-2.5	80	24.1	-23.7	-4.1			
23	267	1.8	1.8	0.1	263	2.3	2.3	0.3	319	0.9	0.6	-0.7	39	1.4	-0.9	-1.1	68	3.1	-2.9	-1.2	64	13.6	-12.2	-6.0	68	19.3	-17.9	-7.3			
24	315	0.1	0.1	-0.1	286	2.6	2.5	-0.7	286	2.6	2.5	-0.7	120	2.2	-1.9	1.1	86	8.6	-8.6	-0.6	94	14.3	-14.3	1.1	87	21.1	-21.1	-1.2			
25	294	2.0	1.8	-0.8	297	3.6	3.2	-1.6	275	1.2	1.2	-0.1	122	2.6	-2.2	1.4	104	7.0	-6.8	1.7	95	12.7	-12.7	1.0	81	24.1	-23.8	-3.9			
26	309	1.9	1.5	-1.2	301	3.1	2.7	-1.6	338	2.2	0.8	-2.0	111	4.5	-4.2	1.6	76	8.1	-7.9	-1.9	90	14.5	-14.5	-0.1	90	24.7	-24.7	-0.1			
27	291	0.9	0.8	-0.3	310	3.1	2.4	-2.0	349	2.1	0.4	-2.1	74	3.2	-3.1	-0.9	84	10.3	-10.2	-1.1	110	11.9	-11.2	4.0	—	—	—	—			
28	288	2.8	2.7	-0.9	336	3.9	1.6	-3.6	30	3.9	-2.0	-3.4	68	4.0	-3.7	-1.5	97	7.6	-7.5	0.9	105	14.6	-14.1	3.8	71	25.0	-23.6	-8.1			
29	255	3.1	3.0	0.8	303	3.8	3.2	-2.1	310	2.3	1.8	-1.5	3	1.7	-0.1	-1.7	99	6.4	-6.3	1.0	93	13.1	-13.1	0.8	87	26.5	-26.5	-1.2			
30	264	1.9	1.9	0.2	342	2.9	0.9	-2.8	357	3.4	0.2	-3.4	86	3.2	-3.2	-0.2	84	3.7	-3.7	-0.4	82	10.7	-10.6	-1.4	—	—	—	—			
31	259	7.8	7.7	1.5	279	4.4	4.3	-0.7	303	4.2	3.5	-2.3	286	1.8	1.7	-0.5	108	5.5	-5.2	1.7	81	15.3	-15.1	-2.5	89	26.4	-26.4	-0.3			

Daily Normals of Upper Air Winds (1971-2000)

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RAIPUR

SEPTEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	261	5.5	5.4	0.9	272	3.8	3.8	-0.1	284	2.5	2.4	-0.6	248	0.5	0.5	0.2	117	4.5	-4.0	2.0	93	11.1	-11.1	0.6	84	17.8	-17.7	-1.8			
2	260	8.8	8.7	1.6	281	5.1	5.0	-1.0	298	3.2	2.8	-1.5	225	1.8	1.3	1.3	65	5.2	-4.7	-2.2	82	9.5	-9.4	-1.3	85	22.2	-22.1	-2.0			
3	265	3.6	3.6	0.3	284	4.0	3.9	-1.0	296	2.8	2.5	-1.2	256	2.1	2.0	0.5	101	3.2	-3.1	0.6	111	11.3	-10.5	4.1	88	19.5	-19.5	-0.6			
4	275	3.7	3.7	-0.3	298	4.2	3.7	-2.0	296	3.2	2.9	-1.4	16	2.6	-0.7	-2.5	74	4.4	-4.2	-1.2	100	10.9	-10.7	1.8	81	20.6	-20.4	-3.1			
5	220	4.3	2.8	3.3	288	2.6	2.5	-0.8	315	3.0	2.1	-2.1	25	2.3	-1.0	-2.1	76	7.2	-7.0	-1.7	86	12.7	-12.7	-0.9	63	30.0	-26.7	-13.6			
6	245	4.3	3.9	1.8	296	3.9	3.5	-1.7	315	3.3	2.3	-2.3	273	2.0	2.0	-0.1	88	2.8	-2.8	-0.1	110	7.0	-6.6	2.4	90	21.4	-21.4	0.0			
7	278	3.6	3.6	-0.5	312	4.6	3.4	-3.1	326	3.0	1.7	-2.5	360	0.2	0.0	-0.2	81	5.7	-5.6	-0.9	98	9.2	-9.1	1.3	88	19.4	-19.4	-0.8			
8	287	4.5	4.3	-1.3	321	4.0	2.5	-3.1	331	2.1	1.0	-1.8	30	0.8	-0.4	-0.7	110	6.4	-6.0	2.2	123	6.4	-5.4	3.5	98	14.0	-13.9	1.9			
9	237	2.7	2.3	1.5	293	2.8	2.6	-1.1	303	2.0	1.7	-1.1	135	0.6	-0.4	0.4	110	5.0	-4.7	1.7	114	10.5	-9.6	4.3	89	15.0	-15.0	-0.3			
10	230	2.5	1.9	1.6	307	2.6	2.1	-1.6	331	2.6	1.3	-2.3	207	1.8	0.8	1.6	84	2.9	-2.9	-0.3	88	7.0	-7.0	-0.3	103	16.6	-16.2	3.8			
11	264	2.8	2.8	0.3	302	2.5	2.1	-1.3	313	1.9	1.4	-1.3	295	2.6	2.4	-1.1	108	2.5	-2.4	0.8	77	7.4	-7.2	-1.6	91	14.8	-14.8	0.3			
12	254	2.5	2.4	0.7	299	4.1	3.6	-2.0	294	3.0	2.7	-1.2	223	1.6	1.1	1.2	97	4.0	-4.0	0.5	98	9.4	-9.3	1.3	79	17.5	-17.2	-3.2			
13	264	3.7	3.7	0.4	310	3.3	2.5	-2.1	300	4.0	3.5	-2.0	328	1.9	1.0	-1.6	66	2.0	-1.8	-0.8	104	5.5	-5.3	1.3	89	14.1	-14.1	-0.3			
14	290	3.7	3.5	-1.3	326	4.1	2.3	-3.4	328	3.9	2.1	-3.3	321	2.1	1.3	-1.6	84	3.1	-3.1	-0.3	101	7.4	-7.3	1.4	87	12.4	-12.4	-0.6			
15	307	3.6	2.9	-2.2	325	4.4	2.5	-3.6	342	3.3	1.0	-3.1	287	1.0	1.0	-0.3	98	2.7	-2.7	0.4	95	7.1	-7.1	0.6	80	15.4	-15.2	-2.7			
16	265	3.3	3.3	0.3	294	2.4	2.2	-1.0	327	2.0	1.1	-1.7	231	1.3	1.0	0.8	112	2.4	-2.2	0.9	117	8.5	-7.6	3.8	81	13.7	-13.5	-2.2			
17	282	4.3	4.2	-0.9	339	2.8	1.0	-2.6	335	2.6	1.1	-2.4	263	0.8	0.8	0.1	292	0.5	0.5	-0.2	120	3.2	-2.8	1.6	93	10.7	-10.7	0.5			
18	270	3.0	3.0	0.0	356	1.3	0.1	-1.3	323	2.0	1.2	-1.6	124	1.8	-1.5	1.0	124	1.8	-1.5	1.0	166	2.1	-0.5	2.0	73	10.4	-10.0	-3.0			
19	276	3.9	3.9	-0.4	298	2.4	2.1	-1.1	301	3.3	2.8	-1.7	245	3.8	3.5	1.6	93	3.6	-3.6	0.2	136	5.2	-3.6	3.7	95	14.3	-14.2	1.3			
20	308	1.6	1.3	-1.0	348	2.4	0.5	-2.3	360	2.3	0.0	-2.3	288	0.3	0.3	-0.1	117	2.9	-2.6	1.3	119	5.0	-4.4	2.4	126	13.5	-10.9	7.9			
21	330	3.4	1.7	-3.0	352	2.2	0.3	-2.2	347	1.7	0.4	-1.7	240	0.8	0.7	0.4	106	1.9	-1.8	0.5	109	5.8	-5.5	1.9	80	12.6	-12.4	-2.1			
22	332	2.1	1.0	-1.9	11	2.0	-0.4	-2.0	327	2.0	1.1	-1.7	198	1.9	0.6	1.8	130	3.8	-2.9	2.4	201	1.7	0.6	1.6	103	5.0	-4.9	1.1			
23	7	1.7	-0.2	-1.7	21	1.4	-0.5	-1.3	356	1.3	0.1	-1.3	225	2.1	1.5	1.5	139	2.1	-1.4	1.6	113	4.1	-3.8	1.6	109	6.5	-6.1	2.1			
24	328	1.9	1.0	-1.6	17	1.0	-0.3	-1.0	38	1.1	-0.7	-0.9	221	1.1	0.7	0.8	122	2.2	-1.9	1.2	92	6.6	-6.6	0.2	74	12.0	-11.5	-3.3			
25	326	2.5	1.4	-2.1	348	3.9	0.8	-3.8	354	3.0	0.3	-3.0	321	0.6	0.4	-0.5	228	1.2	0.9	0.8	143	3.4	-2.0	2.7	124	6.6	-5.5	3.7			
26	22	3.5	-1.3	-3.2	351	3.6	0.6	-3.6	338	3.7	1.4	-3.4	321	2.2	1.4	-1.7	279	2.4	2.4	-0.4	150	2.0	-1.0	1.7	99	11.6	-11.5	1.8			
27	29	2.9	-1.4	-2.5	330	2.8	1.4	-2.4	342	3.3	1.0	-3.1	349	1.6	0.3	-1.6	238	4.9	4.2	2.6	185	6.7	0.6	6.7	90	15.3	-15.3	-0.1			
28	351	1.3	0.2	-1.3	320	3.1	2.0	-2.4	315	2.7	1.9	-1.9	259	3.1	3.0	0.6	195	2.4	0.6	2.3	158	2.9	-1.1	2.7	86	6.7	-6.7	-0.5			
29	34	1.8	-1.0	-1.5	3	4.1	-0.2	-4.1	346	3.3	0.8	-3.2	322	2.3	1.4	-1.8	196	3.3	0.9	3.2	159	4.8	-1.7	4.5	91	9.7	-9.7	0.2			
30	28	2.4	-1.1	-2.1	360	3.8	0.0	-3.8	331	2.3	1.1	-2.0	280	1.7	1.7	-0.3	229	3.7	2.8	2.4	186	4.8	0.5	4.8	97	7.4	-7.3	0.9			

Daily Normals of Upper Air Winds (1971-2000)

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RAIPUR

OCTOBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	45	2.8	-2.0	-2.0	7	4.0	-0.5	-4.0	356	2.8	0.2	-2.8	244	2.5	2.3	1.1	219	4.3	2.7	3.3	185	3.7	0.3	3.7	94	10.4	-10.4	0.7			
2	21	2.2	-0.8	-2.1	6	3.7	-0.4	-3.7	360	2.3	0.0	-2.3	235	2.1	1.7	1.2	213	5.1	2.8	4.3	192	7.2	1.5	7.0	108	5.2	-5.0	1.6			
3	19	2.8	-0.9	-2.6	2	4.6	-0.2	-4.6	360	2.3	0.0	-2.3	264	2.0	2.0	0.2	218	4.1	2.5	3.2	205	2.6	1.1	2.4	111	5.3	-5.0	1.9			
4	38	1.1	-0.7	-0.9	4	1.4	-0.1	-1.4	349	1.0	0.2	-1.0	236	1.8	1.5	1.0	236	2.9	2.4	1.6	206	4.9	2.1	4.4	98	2.7	-2.7	0.4			
5	19	3.6	-1.2	-3.4	21	3.3	-1.2	-3.1	351	2.0	0.3	-2.0	253	3.9	3.7	1.1	231	6.8	5.3	4.3	238	7.3	6.2	3.9	143	5.4	-3.2	4.3			
6	52	3.3	-2.6	-2.0	49	2.0	-1.5	-1.3	360	0.7	0.0	-0.7	241	6.0	5.2	2.9	227	10.2	7.5	6.9	225	9.5	6.7	6.8	81	5.0	-4.9	-0.8			
7	48	3.8	-2.8	-2.5	17	2.1	-0.6	-2.0	305	1.2	1.0	-0.7	250	3.2	3.0	1.1	244	7.2	6.5	3.2	223	10.1	6.9	7.4	149	7.9	-4.1	6.7			
8	328	0.9	0.5	-0.8	339	4.0	1.4	-3.7	311	5.2	3.9	-3.4	276	7.6	7.6	-0.8	247	10.6	9.7	4.2	236	6.0	5.0	3.4	122	5.9	-5.0	3.1			
9	59	3.3	-2.8	-1.7	8	2.1	-0.3	-2.1	330	4.3	2.1	-3.7	287	5.4	5.2	-1.6	259	8.8	8.6	1.7	233	8.6	6.9	5.2	155	2.1	-0.9	1.9			
10	54	3.2	-2.6	-1.9	2	3.0	-0.1	-3.0	332	3.0	1.4	-2.6	281	2.5	2.5	-0.5	246	8.5	7.8	3.4	242	9.4	8.3	4.5	120	0.8	-0.7	0.4			
11	75	3.1	-3.0	-0.8	12	3.5	-0.7	-3.4	6	3.0	-0.3	-3.0	285	4.3	4.2	-1.1	242	7.1	6.3	3.3	231	7.7	6.0	4.8	216	3.9	2.3	3.2			
12	44	2.9	-2.0	-2.1	12	2.9	-0.6	-2.8	338	3.1	1.2	-2.9	272	5.0	5.0	-0.2	246	8.5	7.8	3.5	221	10.8	7.1	8.2	158	2.9	-1.1	2.7			
13	49	2.3	-1.7	-1.5	352	3.6	0.5	-3.6	346	3.4	0.8	-3.3	264	5.5	5.5	0.6	240	11.9	10.3	6.0	231	11.8	9.2	7.4	216	4.6	2.7	3.7			
14	38	3.4	-2.1	-2.7	360	4.0	0.0	-4.0	355	4.6	0.4	-4.6	273	3.8	3.8	-0.2	240	14.5	12.6	7.2	234	19.2	15.5	11.4	186	5.5	0.6	5.5			
15	51	4.9	-3.8	-3.1	11	3.8	-0.7	-3.7	352	2.2	0.3	-2.2	294	4.5	4.1	-1.8	239	9.4	8.0	4.9	213	14.8	8.1	12.4	216	5.1	3.0	4.1			
16	41	4.1	-2.7	-3.1	12	4.3	-0.9	-4.2	344	2.5	0.7	-2.4	281	4.3	4.2	-0.8	250	9.2	8.6	3.2	224	15.2	10.6	10.9	133	4.2	-3.1	2.9			
17	31	2.3	-1.2	-2.0	351	3.8	0.6	-3.8	313	1.8	1.3	-1.2	281	3.8	3.7	-0.7	256	10.4	10.1	2.5	234	10.5	8.5	6.1	129	4.8	-3.7	3.0			
18	15	1.1	-0.3	-1.1	347	3.6	0.8	-3.5	337	3.4	1.3	-3.1	298	3.8	3.4	-1.8	250	8.6	8.1	3.0	247	9.6	8.8	3.8	76	3.8	-3.7	-0.9			
19	18	2.8	-0.9	-2.7	2	2.8	-0.1	-2.8	347	1.7	0.4	-1.7	244	5.5	5.0	2.4	249	10.3	9.6	3.6	243	12.3	11.0	5.6	222	2.4	1.6	1.8			
20	14	3.0	-0.7	-2.9	358	3.4	0.1	-3.4	313	2.1	1.5	-1.4	258	5.9	5.8	1.2	251	12.2	11.5	4.0	240	6.6	5.7	3.3	88	2.7	-2.7	-0.1			
21	2	2.6	-0.1	-2.6	5	3.7	-0.3	-3.7	322	3.7	2.3	-2.9	260	7.8	7.7	1.4	244	13.3	12.0	5.8	245	12.6	11.4	5.3	220	3.9	2.5	3.0			
22	35	1.2	-0.7	-1.0	2	2.6	-0.1	-2.6	332	3.4	1.6	-3.0	281	6.2	6.1	-1.2	254	12.0	11.5	3.4	239	12.2	10.5	6.3	106	1.9	-1.8	0.5			
23	32	2.5	-1.3	-2.1	360	2.9	0.0	-2.9	285	3.1	3.0	-0.8	269	6.4	6.4	0.1	250	14.7	13.8	5.1	247	18.5	17.1	7.1	204	6.4	2.6	5.8			
24	48	3.0	-2.2	-2.0	8	3.0	-0.4	-3.0	311	3.5	2.6	-2.3	278	7.6	7.5	-1.0	265	15.5	15.4	1.4	252	13.5	12.9	4.1	231	4.4	3.4	2.8			
25	44	3.5	-2.4	-2.5	30	3.4	-1.7	-2.9	351	3.1	0.5	-3.1	280	9.1	9.0	-1.6	257	12.9	12.5	3.0	256	16.2	15.7	4.0	208	6.7	3.2	5.9			
26	42	3.6	-2.4	-2.7	11	3.3	-0.6	-3.2	318	3.1	2.1	-2.3	269	7.4	7.4	0.1	261	15.6	15.4	2.4	245	17.6	16.0	7.3	183	2.1	0.1	2.1			
27	27	4.5	-2.0	-4.0	18	3.3	-1.0	-3.1	332	4.1	1.9	-3.6	268	8.2	8.2	0.3	254	15.6	15.0	4.4	239	21.6	18.5	11.1	239	5.6	4.8	2.9			
28	19	4.3	-1.4	-4.1	8	3.6	-0.5	-3.6	313	5.0	3.7	-3.4	279	8.7	8.6	-1.4	260	18.2	17.9	3.1	241	24.3	21.3	11.6	71	4.6	-4.4	-1.5			
29	28	3.2	-1.5	-2.8	12	3.0	-0.6	-2.9	319	2.9	1.9	-2.2	283	8.1	7.9	-1.8	256	17.3	16.8	4.2	248	25.2	23.3	9.6	233	9.1	7.2	5.5			
30	35	4.0	-2.3	-3.3	18	3.5	-1.1	-3.3	350	2.7	0.5	-2.7	277	6.4	6.4	-0.8	263	13.9	13.8	1.8	245	16.9	15.3	7.2	279	5.9	5.8	-0.9			
31	41	4.3	-2.8	-3.2	18	3.6	-1.1	-3.4	351	2.6	0.4	-2.6	271	7.9	7.9	-0.2	258	16.1	15.7	3.4	240	12.8	11.1	6.4	20	3.3	-1.1	-3.1			

Daily Normals of Upper Air Winds (1971-2000)

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RAIPUR

NOVEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	38	3.7	-2.3	-2.9	32	3.6	-1.9	-3.1	342	1.9	0.6	-1.8	282	6.6	6.5	-1.4	261	15.8	15.6	2.6	255	15.9	15.4	4.0	270	6.2	6.2	0.0			
2	43	4.2	-2.9	-3.1	30	3.4	-1.7	-2.9	323	2.5	1.5	-2.0	300	8.3	7.2	-4.1	269	16.3	16.3	0.3	258	17.3	16.9	3.7	283	13.4	13.0	-3.1			
3	38	3.3	-2.0	-2.6	42	3.9	-2.6	-2.9	317	2.1	1.4	-1.5	286	7.8	7.5	-2.1	274	17.9	17.8	-1.4	258	23.1	22.6	4.8	241	9.3	8.1	4.5			
4	34	3.2	-1.8	-2.7	21	3.3	-1.2	-3.1	325	3.3	1.9	-2.7	279	9.0	8.9	-1.4	265	19.0	18.9	1.5	258	28.0	27.4	5.6	266	12.5	12.5	0.9			
5	58	3.9	-3.3	-2.1	21	3.4	-1.2	-3.2	323	2.5	1.5	-2.0	284	9.8	9.5	-2.3	261	20.6	20.4	3.2	255	24.0	23.2	6.1	194	6.4	1.6	6.2			
6	52	4.1	-3.2	-2.5	26	3.0	-1.3	-2.7	327	2.7	1.5	-2.3	283	9.3	9.1	-2.1	267	20.1	20.1	1.1	254	26.4	25.4	7.3	254	10.0	9.6	2.7			
7	44	3.6	-2.5	-2.6	16	3.2	-0.9	-3.1	327	3.3	1.8	-2.8	293	9.1	8.4	-3.5	268	20.1	20.1	0.8	254	28.2	27.1	7.7	213	5.9	3.2	5.0			
8	66	1.7	-1.6	-0.7	22	2.7	-1.0	-2.5	345	3.5	0.9	-3.4	291	8.5	7.9	-3.0	265	18.5	18.4	1.5	256	21.2	20.6	5.0	257	11.0	10.7	2.5			
9	5	3.2	-0.3	-3.2	360	3.7	0.0	-3.7	309	4.0	3.1	-2.5	276	11.5	11.4	-1.2	266	20.3	20.3	1.3	251	25.1	23.8	8.1	257	4.4	4.3	1.0			
10	13	3.1	-0.7	-3.0	331	3.3	1.6	-2.9	296	4.9	4.4	-2.1	271	9.0	9.0	-0.1	265	20.6	20.5	1.8	256	19.8	19.2	4.9	312	5.7	4.2	-3.8			
11	5	2.5	-0.2	-2.5	351	1.8	0.3	-1.8	313	4.0	2.9	-2.7	279	11.3	11.2	-1.7	265	19.8	19.7	1.8	254	25.2	24.2	6.9	259	8.1	7.9	1.6			
12	31	1.7	-0.9	-1.5	15	2.3	-0.6	-2.2	320	3.5	2.3	-2.7	296	6.9	6.2	-3.0	272	19.5	19.5	-0.6	255	25.0	24.2	6.4	270	4.8	4.8	0.0			
13	23	3.0	-1.2	-2.8	12	3.4	-0.7	-3.3	330	3.6	1.8	-3.1	293	8.5	7.8	-3.3	267	23.7	23.7	1.3	248	21.7	20.1	8.1	312	5.4	4.0	-3.6			
14	49	2.3	-1.7	-1.5	14	3.0	-0.7	-2.9	303	2.7	2.3	-1.5	284	6.7	6.5	-1.6	267	20.5	20.5	1.1	255	24.5	23.7	6.4	277	16.8	16.7	-2.0			
15	44	3.9	-2.7	-2.8	14	3.3	-0.8	-3.2	329	1.7	0.9	-1.5	286	6.4	6.1	-1.8	267	22.8	22.8	1.2	253	27.7	26.5	8.0	276	8.8	8.8	-0.9			
16	53	1.5	-1.2	-0.9	7	1.7	-0.2	-1.7	310	3.5	2.7	-2.3	282	7.7	7.5	-1.6	265	19.8	19.7	1.6	254	22.2	21.4	6.0	266	7.3	7.3	0.5			
17	45	2.0	-1.4	-1.4	22	2.7	-1.0	-2.5	279	3.3	3.3	-0.5	274	9.5	9.5	-0.6	264	21.4	21.3	2.4	253	31.6	30.2	9.2	275	11.0	11.0	-0.9			
18	30	2.0	-1.0	-1.7	355	3.2	0.3	-3.2	309	4.0	3.1	-2.5	276	9.7	9.6	-1.0	263	23.8	23.6	3.0	249	25.1	23.4	9.2	262	11.0	10.9	1.5			
19	49	2.1	-1.6	-1.4	355	2.4	0.2	-2.4	298	4.7	4.1	-2.2	272	11.9	11.9	-0.5	256	23.6	22.9	5.6	236	30.0	25.0	16.6	257	11.1	10.8	2.4			
20	24	1.2	-0.5	-1.1	347	2.3	0.5	-2.2	301	4.2	3.6	-2.2	277	11.3	11.2	-1.4	258	25.7	25.1	5.3	248	28.9	26.7	11.0	269	22.1	22.1	0.2			
21	35	3.5	-2.0	-2.9	8	3.0	-0.4	-3.0	294	4.5	4.1	-1.8	259	9.6	9.4	1.8	251	24.3	23.0	7.9	239	34.7	29.8	17.7	258	20.3	19.8	4.3			
22	62	1.7	-1.5	-0.8	2	2.5	-0.1	-2.5	288	4.7	4.5	-1.5	265	12.3	12.3	1.1	248	25.9	24.1	9.5	247	24.0	22.1	9.4	245	8.9	8.0	3.8			
23	18	4.0	-1.2	-3.8	351	4.0	0.6	-4.0	292	4.6	4.3	-1.7	267	11.2	11.2	0.5	264	21.4	21.3	2.1	245	31.5	28.5	13.5	282	13.1	12.8	-2.7			
24	8	4.4	-0.6	-4.4	354	3.8	0.4	-3.8	318	4.7	3.2	-3.5	280	11.2	11.0	-1.9	268	22.0	22.0	0.7	247	23.8	22.0	9.2	230	10.2	7.8	6.6			
25	347	2.2	0.5	-2.1	339	3.3	1.2	-3.1	297	4.6	4.1	-2.1	284	13.8	13.4	-3.4	268	26.9	26.9	0.8	244	30.6	27.5	13.4	267	13.2	13.2	0.8			
26	354	2.8	0.3	-2.8	336	3.0	1.2	-2.7	301	5.2	4.5	-2.7	282	12.4	12.1	-2.6	264	29.7	29.5	3.0	256	29.8	29.0	7.0	266	15.0	15.0	1.1			
27	13	2.8	-0.6	-2.7	348	3.3	0.7	-3.2	294	6.0	5.5	-2.5	268	14.0	14.0	0.5	262	24.6	24.3	3.5	248	28.1	26.0	10.7	267	18.2	18.2	1.0			
28	37	2.6	-1.6	-2.1	339	2.8	1.0	-2.6	308	6.3	5.0	-3.9	275	13.8	13.8	-1.1	267	26.4	26.4	1.4	247	29.0	26.7	11.2	275	16.5	16.4	-1.3			
29	23	3.0	-1.2	-2.8	348	3.0	0.6	-2.9	301	5.1	4.4	-2.6	282	11.8	11.6	-2.4	257	24.3	23.7	5.4	246	27.1	24.7	11.1	234	14.4	11.6	8.5			
30	4	2.9	-0.2	-2.9	332	3.6	1.7	-3.2	301	6.9	5.9	-3.5	279	12.8	12.6	-2.0	262	24.2	24.0	3.3	252	30.4	28.9	9.3	208	7.6	3.5	6.7			

Daily Normals of Upper Air Winds (1971-2000)

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RAIPUR

DECEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	1	7.0	-0.1	-7.0	348	2.5	0.5	-2.4	301	6.6	5.6	-3.4	280	13.9	13.7	-2.4	267	24.3	24.3	1.2	253	24.7	23.6	7.2	253	13.0	12.4	3.8			
2	23	2.8	-1.1	-2.6	343	2.4	0.7	-2.3	291	4.5	4.2	-1.6	282	12.7	12.4	-2.7	268	24.0	24.0	0.8	255	27.0	26.0	7.1	307	13.5	10.8	-8.1			
3	48	1.3	-1.0	-0.9	324	1.9	1.1	-1.5	286	5.0	4.8	-1.4	276	12.0	11.9	-1.2	262	19.6	19.4	2.6	255	26.7	25.8	7.0	212	12.7	6.8	10.7			
4	14	3.4	-0.8	-3.3	337	2.3	0.9	-2.1	305	5.4	4.4	-3.1	282	12.2	11.9	-2.6	265	21.7	21.6	1.7	250	26.3	24.7	9.1	259	7.5	7.4	1.4			
5	17	3.4	-1.0	-3.3	345	4.3	1.1	-4.2	313	6.3	4.6	-4.3	283	12.7	12.4	-2.8	263	19.0	18.9	2.2	247	26.7	24.5	10.6	279	7.0	6.9	-1.1			
6	28	3.4	-1.6	-3.0	3	3.3	-0.2	-3.3	298	5.1	4.5	-2.4	284	12.4	12.0	-3.0	258	28.0	27.3	6.0	240	30.7	26.5	15.5	229	9.2	7.0	6.0			
7	18	3.8	-1.2	-3.6	355	4.9	0.4	-4.9	319	6.4	4.2	-4.8	293	11.3	10.4	-4.4	272	22.3	22.3	-0.6	248	29.4	27.3	10.9	250	16.6	15.6	5.8			
8	8	3.0	-0.4	-3.0	6	4.1	-0.4	-4.1	316	4.6	3.2	-3.3	270	11.5	11.5	-0.1	262	23.7	23.5	3.1	258	32.1	31.3	6.9	253	15.2	14.5	4.5			
9	11	1.0	-0.2	-1.0	2	2.4	-0.1	-2.4	286	4.1	3.9	-1.1	266	12.0	12.0	0.9	262	25.6	25.3	3.7	237	29.0	24.3	15.9	256	13.5	13.1	3.3			
10	335	2.9	1.2	-2.6	350	2.8	0.5	-2.8	297	5.4	4.8	-2.4	274	11.2	11.2	-0.7	262	26.6	26.3	3.9	247	30.7	28.3	11.8	266	13.8	13.8	0.9			
11	8	2.9	-0.4	-2.9	342	1.3	0.4	-1.2	292	5.4	5.0	-2.0	273	15.7	15.7	-0.9	269	26.9	26.9	0.4	260	29.0	28.5	5.2	267	16.5	16.5	0.8			
12	17	1.4	-0.4	-1.3	330	2.0	1.0	-1.7	267	6.1	6.1	0.3	265	12.9	12.9	1.1	251	23.7	22.5	7.6	247	25.1	23.1	9.8	271	10.3	10.3	-0.2			
13	9	2.4	-0.4	-2.4	320	2.3	1.5	-1.8	285	7.5	7.3	-1.9	277	12.0	11.9	-1.4	258	27.1	26.5	5.6	257	30.7	29.9	6.9	248	10.0	9.2	3.8			
14	14	2.1	-0.5	-2.0	335	3.1	1.3	-2.8	286	6.6	6.3	-1.8	271	13.0	13.0	-0.2	263	26.3	26.1	3.2	254	34.1	32.8	9.2	267	21.0	21.0	1.2			
15	18	2.8	-0.9	-2.7	322	2.3	1.4	-1.8	286	6.8	6.5	-1.9	282	16.3	15.9	-3.4	268	26.4	26.4	0.7	260	32.1	31.6	5.8	269	16.2	16.2	0.4			
16	37	3.0	-1.8	-2.4	351	1.8	0.3	-1.8	297	6.1	5.4	-2.8	265	14.1	14.0	1.3	269	28.6	28.6	0.6	248	29.6	27.5	11.0	256	22.6	21.9	5.5			
17	28	2.7	-1.3	-2.4	350	2.3	0.4	-2.3	303	6.6	5.5	-3.6	282	13.6	13.3	-2.9	269	27.2	27.2	0.3	252	31.5	29.9	9.9	260	21.2	20.9	3.7			
18	17	2.4	-0.7	-2.3	342	2.2	0.7	-2.1	300	7.8	6.8	-3.9	287	16.5	15.8	-4.7	266	30.8	30.7	1.9	255	24.8	23.9	6.5	263	19.3	19.2	2.4			
19	15	2.4	-0.6	-2.3	317	1.9	1.3	-1.4	306	7.9	6.4	-4.7	280	12.5	12.3	-2.2	263	26.4	26.2	3.3	253	31.3	29.9	9.2	276	24.2	24.1	-2.4			
20	349	2.1	0.4	-2.1	335	1.7	0.7	-1.5	306	5.7	4.6	-3.4	290	15.3	14.3	-5.3	279	29.5	29.2	-4.4	261	33.5	33.1	5.4	284	15.7	15.2	-3.9			
21	9	1.8	-0.3	-1.8	319	2.8	1.8	-2.1	306	7.6	6.1	-4.5	293	15.4	14.2	-6.0	278	30.1	29.8	-4.2	259	31.1	30.6	5.7	265	18.0	17.9	1.7			
22	7	2.3	-0.3	-2.3	309	2.1	1.6	-1.3	310	7.9	6.0	-5.1	288	14.2	13.5	-4.4	276	24.7	24.6	-2.6	259	39.1	38.4	7.6	273	20.0	20.0	-0.9			
23	6	3.0	-0.3	-3.0	318	2.4	1.6	-1.8	296	6.8	6.1	-3.0	282	16.7	16.3	-3.6	273	28.6	28.6	-1.3	250	36.1	33.9	12.3	269	20.2	20.2	0.3			
24	25	2.1	-0.9	-1.9	327	2.7	1.5	-2.3	279	7.1	7.0	-1.1	275	15.9	15.8	-1.4	275	28.5	28.4	-2.6	257	39.9	38.9	8.8	258	36.5	35.7	7.8			
25	16	1.5	-0.4	-1.4	283	1.3	1.3	-0.3	293	5.6	5.1	-2.2	280	15.0	14.8	-2.5	269	29.9	29.9	0.7	258	32.1	31.4	6.9	247	15.1	13.9	5.8			
26	19	2.4	-0.8	-2.3	330	2.2	1.1	-1.9	284	5.6	5.4	-1.3	276	14.6	14.5	-1.6	264	29.7	29.5	3.0	263	38.1	37.8	4.9	261	16.9	16.7	2.5			
27	39	1.4	-0.9	-1.1	315	0.7	0.5	-0.5	278	6.7	6.6	-0.9	272	16.2	16.2	-0.7	270	28.3	28.3	0.1	272	37.4	37.4	-1.2	259	18.2	17.8	3.6			
28	11	1.5	-0.3	-1.5	318	2.8	1.9	-2.1	281	7.1	7.0	-1.3	284	14.9	14.5	-3.5	275	30.3	30.2	-2.9	274	37.9	37.8	-2.5	309	19.3	14.9	-12.2			
29	3	2.0	-0.1	-2.0	319	2.3	1.5	-1.7	299	6.8	6.0	-3.3	270	15.7	15.7	0.0	270	25.3	25.3	0.2	260	34.6	34.1	6.0	280	15.4	15.2	-2.6			
30	344	2.2	0.6	-2.1	294	2.7	2.5	-1.1	289	8.1	7.7	-2.6	268	16.0	16.0	0.5	265	30.9	30.8	2.9	255	36.9	35.6	9.6	270	18.3	18.3	0.0			
31	20	2.3	-0.8	-2.2	292	2.4	2.2	-0.9	285	7.5	7.3	-1.9	273	15.7	15.7	-0.8	270	28.3	28.3	0.2	266	24.9	24.8	1.7	270	22.0	22.0	0.0			

Daily Normals of Upper Air Winds (1971-2000)

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RANCHI

JANUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	310	1.6	1.2	-1.0	298	4.9	4.3	-2.3	296	11.7	10.5	-5.2	285	21.7	21.0	-5.6	278	37.2	36.8	-5.3	267	40.4	40.3	2.2	239	26.0	22.3	13.4			
2	322	2.9	1.8	-2.3	296	5.1	4.6	-2.2	293	12.7	11.7	-5.0	279	26.1	25.8	-4.1	308	36.3	28.5	-22.5	291	48.3	45.1	-17.4	266	20.0	20.0	1.4			
3	347	2.6	0.6	-2.5	308	6.2	4.9	-3.8	298	12.2	10.8	-5.7	280	19.7	19.4	-3.5	276	35.1	34.9	-3.9	276	40.8	40.5	-4.6	267	35.0	34.9	2.1			
4	325	2.9	1.7	-2.4	304	4.1	3.4	-2.3	291	9.6	8.9	-3.5	279	19.2	19.0	-2.9	277	38.8	38.5	-4.6	272	48.3	48.3	-1.7	259	33.0	32.4	6.3			
5	328	2.5	1.3	-2.1	300	5.0	4.3	-2.5	292	11.1	10.3	-4.1	278	21.9	21.7	-3.2	264	33.7	33.5	3.4	254	38.3	36.8	10.5	—	—	—	—			
6	333	1.1	0.5	-1.0	290	3.7	3.5	-1.3	292	11.5	10.7	-4.3	277	21.8	21.6	-2.6	262	38.6	38.2	5.2	295	47.7	43.4	-19.8	294	34.0	31.1	-13.8			
7	139	6.8	-4.5	5.1	297	3.3	2.9	-1.5	290	10.4	9.8	-3.6	272	21.3	21.3	-0.7	260	28.2	27.8	4.9	259	45.8	44.9	9.1	300	32.0	27.7	-16.0			
8	329	2.3	1.2	-2.0	281	5.9	5.8	-1.1	277	10.4	10.3	-1.2	266	25.4	25.3	1.7	283	38.5	37.5	-8.5	279	72.0	71.1	-11.3	—	—	—	—			
9	343	3.7	1.1	-3.5	292	3.5	3.3	-1.3	275	10.6	10.6	-1.0	277	25.0	24.8	-3.0	273	40.8	40.8	-1.8	286	28.6	27.5	-8.0	—	—	—	—			
10	326	4.0	2.2	-3.3	295	4.0	3.6	-1.7	285	10.6	10.2	-2.8	267	21.8	21.8	1.1	275	29.6	29.5	-2.7	255	44.3	42.9	11.1	—	—	—	—			
11	319	2.3	1.5	-1.7	298	3.4	3.0	-1.6	280	10.0	9.8	-1.8	263	23.5	23.3	3.0	247	31.6	29.1	12.2	259	46.4	45.5	9.1	261	21.0	20.7	3.3			
12	280	1.1	1.1	-0.2	290	2.7	2.5	-0.9	283	10.4	10.1	-2.4	261	24.6	24.3	3.9	256	41.6	40.4	9.8	—	—	—	—	—	—	—	—			
13	318	3.8	2.5	-2.8	300	3.9	3.4	-2.0	279	10.9	10.8	-1.8	277	22.8	22.7	-2.6	265	30.4	30.3	2.4	254	26.0	25.0	7.2	255	33.0	31.9	8.5			
14	329	1.7	0.9	-1.5	309	3.3	2.6	-2.1	286	11.7	11.2	-3.3	271	19.6	19.6	-0.3	260	43.5	42.9	7.3	258	38.8	38.0	7.8	262	22.0	21.8	3.1			
15	293	0.8	0.7	-0.3	287	6.1	5.8	-1.8	285	10.9	10.5	-2.8	275	26.0	25.9	-2.3	272	51.2	51.2	-1.6	261	66.3	65.5	10.5	—	—	—	—			
16	315	2.8	2.0	-2.0	292	4.6	4.3	-1.7	285	11.7	11.3	-3.0	275	25.8	25.7	-2.1	259	36.7	36.1	6.7	242	36.0	31.7	17.0	—	—	—	—			
17	318	2.8	1.9	-2.1	293	5.4	5.0	-2.1	282	11.9	11.6	-2.5	277	23.2	23.0	-2.7	281	43.9	43.1	-8.2	266	39.0	38.9	2.7	—	—	—	—			
18	339	2.8	1.0	-2.6	290	4.7	4.4	-1.6	290	12.2	11.5	-4.1	277	21.5	21.3	-2.8	274	45.1	45.0	-3.0	261	56.0	55.3	8.8	254	13.0	12.5	3.6			
19	325	2.9	1.7	-2.4	292	4.2	3.9	-1.6	293	11.9	10.9	-4.7	277	21.4	21.3	-2.5	279	41.3	40.8	-6.3	261	35.8	35.4	5.6	335	23.0	9.7	-20.8			
20	330	2.2	1.1	-1.9	302	4.0	3.4	-2.1	289	11.4	10.8	-3.7	285	20.3	19.6	-5.1	276	38.7	38.5	-4.2	272	47.3	47.3	-1.4	—	—	—	—			
21	309	4.1	3.2	-2.6	292	5.4	5.0	-2.0	292	13.5	12.5	-5.1	284	25.5	24.8	-6.0	279	42.5	42.0	-6.8	288	46.7	44.4	-14.4	274	34.0	33.9	-2.4			
22	317	4.4	3.0	-3.2	295	5.9	5.3	-2.5	301	11.4	9.8	-5.9	274	24.6	24.5	-1.9	260	38.9	38.4	6.5	242	44.5	39.3	20.9	—	—	—	—			
23	321	4.0	2.5	-3.1	294	6.1	5.6	-2.5	283	13.0	12.7	-3.0	276	29.9	29.7	-3.2	275	39.3	39.2	-3.4	279	40.9	40.4	-6.5	—	—	—	—			
24	293	4.0	3.7	-1.6	290	5.3	5.0	-1.8	297	14.3	12.7	-6.5	284	20.2	19.6	-4.8	264	29.0	28.9	2.9	263	34.2	33.9	4.2	—	—	—	—			
25	317	6.6	4.5	-4.8	305	6.7	5.5	-3.9	296	12.4	11.1	-5.5	275	21.3	21.2	-1.8	270	30.8	30.8	0.1	255	32.3	31.2	8.4	—	—	—	—			
26	316	6.1	4.2	-4.4	312	6.4	4.7	-4.3	299	11.2	9.8	-5.5	274	21.0	20.9	-1.6	260	34.2	33.7	6.1	264	42.0	41.8	4.5	255	19.3	18.6	5.0			
27	316	4.5	3.1	-3.2	303	6.1	5.1	-3.3	302	10.4	8.8	-5.5	277	22.2	22.0	-2.6	261	43.1	42.5	6.9	—	—	—	—	—	—	—	—			
28	326	3.6	2.0	-3.0	307	5.4	4.3	-3.2	299	11.4	9.9	-5.6	282	21.1	20.6	-4.5	269	29.9	29.9	0.5	270	36.2	36.2	0.2	249	49.0	45.7	17.6			
29	284	2.9	2.8	-0.7	280	4.8	4.7	-0.8	276	12.9	12.8	-1.4	278	23.5	23.3	-3.2	278	37.9	37.5	-5.3	276	43.6	43.3	-4.7	—	—	—	—			
30	310	4.3	3.3	-2.8	297	5.7	5.1	-2.6	283	11.8	11.5	-2.7	272	25.7	25.7	-0.7	267	46.0	45.9	2.5	276	43.2	43.0	-4.4	—	—	—	—			
31	316	2.8	1.9	-2.0	286	4.7	4.5	-1.3	274	10.9	10.9	-0.7	275	21.8	21.7	-1.8	268	42.7	42.7	1.8	270	44.0	44.0	0.0	—	—	—	—			

Daily Normals of Upper Air Winds (1971-2000)

RANCHI

FEBRUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	333	2.2	1.0	-2.0	300	4.6	4.0	-2.3	277	13.7	13.6	-1.6	278	29.3	29.0	-4.3	264	50.7	50.5	5.0	266	66.0	65.8	4.6	—	—	—	—
2	344	1.5	0.4	-1.4	304	3.0	2.5	-1.7	285	11.3	10.9	-3.0	274	29.6	29.5	-2.1	277	49.1	48.7	-6.1	—	—	—	—	—	—	—	—
3	322	3.7	2.3	-2.9	299	4.6	4.0	-2.2	288	10.8	10.2	-3.4	280	23.0	22.6	-4.1	270	37.9	37.9	0.2	263	41.5	41.1	5.4	268	50.0	50.0	1.7
4	332	3.4	1.6	-3.0	293	5.4	5.0	-2.1	284	11.5	11.2	-2.8	278	24.6	24.3	-3.5	276	45.9	45.6	-5.0	280	56.2	55.3	-9.9	—	—	—	—
5	302	2.6	2.2	-1.4	294	5.4	4.9	-2.2	284	12.2	11.8	-2.9	282	25.0	24.4	-5.3	273	43.6	43.5	-2.4	276	49.3	49.0	-5.5	271	30.0	30.0	-0.5
6	310	2.6	2.0	-1.7	289	4.6	4.3	-1.5	283	13.3	13.0	-2.9	277	21.0	20.8	-2.7	270	38.7	38.7	0.2	260	56.9	56.0	10.1	—	—	—	—
7	312	3.1	2.3	-2.1	295	5.2	4.7	-2.2	288	11.4	10.8	-3.6	271	18.5	18.5	-0.2	266	35.8	35.7	2.8	264	39.2	39.0	4.4	262	23.2	22.9	3.4
8	277	2.3	2.3	-0.3	297	4.2	3.7	-1.9	277	12.0	11.9	-1.5	271	20.7	20.7	-0.4	270	30.4	30.4	-0.2	270	43.7	43.7	0.3	—	—	—	—
9	263	1.7	1.7	0.2	292	2.9	2.7	-1.1	281	10.2	10.0	-1.9	274	19.2	19.1	-1.5	271	36.4	36.4	-0.5	280	53.9	53.1	-9.5	265	18.0	17.9	1.6
10	327	1.7	0.9	-1.4	311	4.4	3.3	-2.9	288	10.8	10.3	-3.4	277	17.4	17.3	-2.1	277	31.1	30.9	-3.7	265	37.6	37.4	3.4	239	48.2	41.5	24.6
11	323	3.6	2.2	-2.9	301	5.4	4.6	-2.8	293	13.8	12.7	-5.5	286	22.3	21.5	-6.0	274	38.9	38.8	-3.0	265	45.3	45.1	3.8	277	15.4	15.3	-1.9
12	307	4.8	3.8	-2.9	294	5.2	4.8	-2.1	299	12.7	11.1	-6.1	291	20.1	18.8	-7.1	276	43.6	43.3	-4.7	254	36.7	35.2	10.4	—	—	—	—
13	310	4.5	3.5	-2.9	303	5.5	4.6	-3.0	294	11.9	10.8	-4.9	282	23.1	22.6	-4.8	284	38.2	37.1	-9.2	268	44.7	44.7	1.4	—	—	—	—
14	332	3.4	1.6	-3.0	295	5.2	4.7	-2.2	283	11.3	11.0	-2.5	276	21.3	21.2	-2.3	266	36.1	36.0	2.5	260	43.5	42.8	7.8	—	—	—	—
15	312	3.0	2.2	-2.0	296	4.8	4.3	-2.1	285	13.5	13.0	-3.6	272	26.0	26.0	-1.0	268	36.5	36.5	1.5	248	55.9	51.7	21.2	—	—	—	—
16	305	3.8	3.1	-2.2	282	5.9	5.8	-1.2	279	11.7	11.5	-1.9	274	25.1	25.0	-1.8	247	40.9	37.6	16.1	254	56.0	53.8	15.4	—	—	—	—
17	314	3.3	2.4	-2.3	286	4.7	4.5	-1.3	271	11.1	11.1	-0.2	276	23.0	22.9	-2.3	268	42.1	42.1	1.8	260	47.7	46.9	8.6	—	—	—	—
18	305	3.8	3.1	-2.2	282	6.1	6.0	-1.3	270	13.0	13.0	0.0	276	27.7	27.5	-2.9	260	39.8	39.2	6.6	243	40.0	35.6	18.2	—	—	—	—
19	287	3.0	2.9	-0.9	280	5.1	5.0	-0.9	278	12.1	12.0	-1.7	277	22.4	22.2	-2.7	275	39.3	39.2	-3.4	271	61.0	61.0	-1.1	—	—	—	—
20	310	3.5	2.7	-2.3	310	4.5	3.5	-2.9	283	11.6	11.3	-2.7	279	23.5	23.2	-3.8	279	41.7	41.1	-6.8	261	60.0	59.3	9.4	—	—	—	—
21	290	1.5	1.4	-0.5	288	4.0	3.8	-1.2	280	11.2	11.0	-1.9	281	24.9	24.5	-4.7	293	39.0	35.9	-15.2	285	60.6	58.5	-15.7	—	—	—	—
22	351	2.4	0.4	-2.4	286	5.0	4.8	-1.4	277	12.4	12.3	-1.5	282	26.0	25.5	-5.2	281	40.0	39.3	-7.5	268	43.8	43.8	1.4	—	—	—	—
23	324	5.7	3.4	-4.6	294	6.6	6.0	-2.7	279	11.6	11.5	-1.8	279	22.8	22.5	-3.7	284	36.3	35.2	-8.8	275	34.0	33.9	-2.7	272	10.0	10.0	-0.3
24	312	4.8	3.6	-3.2	292	5.8	5.4	-2.2	282	12.4	12.1	-2.6	280	21.1	20.8	-3.7	269	37.4	37.4	0.4	269	31.8	31.8	0.7	—	—	—	—
25	277	3.3	3.3	-0.4	286	5.6	5.4	-1.5	289	12.6	11.9	-4.0	278	22.6	22.4	-3.1	266	39.8	39.7	2.5	280	50.6	49.8	-9.2	—	—	—	—
26	307	4.4	3.5	-2.6	298	5.9	5.2	-2.8	275	11.2	11.2	-0.9	274	21.8	21.7	-1.7	284	33.2	32.1	-8.3	306	44.6	36.3	-25.9	—	—	—	—
27	312	4.7	3.5	-3.1	305	5.5	4.5	-3.2	291	10.7	10.0	-3.8	283	25.6	24.9	-5.9	281	40.0	39.3	-7.5	306	82.0	66.3	-48.2	—	—	—	—
28	296	3.4	3.1	-1.5	294	5.1	4.7	-2.1	281	10.4	10.2	-2.0	280	22.1	21.8	-3.7	282	34.6	33.9	-6.9	277	58.7	58.3	-7.0	—	—	—	—
29	312	6.0	4.5	-4.0	287	8.9	8.5	-2.6	272	16.4	16.4	-0.5	262	21.3	21.1	2.9	267	33.0	33.0	1.7	255	64.0	61.8	16.6	—	—	—	—

Daily Normals of Upper Air Winds (1971-2000)

RANCHI

MARCH

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	308	5.1	4.0	-3.1	295	6.5	5.9	-2.7	285	13.5	13.0	-3.5	277	21.7	21.5	-2.6	280	33.6	33.0	-6.1	272	42.7	42.7	-1.2	—	—	—	—			
2	302	3.9	3.3	-2.1	282	6.6	6.5	-1.4	283	11.9	11.6	-2.6	282	18.8	18.4	-3.8	274	34.1	34.0	-2.6	253	31.7	30.4	9.1	—	—	—	—			
3	313	4.0	2.9	-2.7	293	4.7	4.3	-1.8	283	11.2	10.9	-2.6	280	18.1	17.8	-3.1	275	26.9	26.8	-2.2	267	39.5	39.4	2.3	266	20.8	20.7	1.6			
4	317	4.7	3.2	-3.4	303	5.9	4.9	-3.2	289	10.5	9.9	-3.5	288	20.2	19.2	-6.2	284	28.8	27.9	-7.0	266	46.9	46.8	3.6	—	—	—	—			
5	307	3.6	2.9	-2.2	289	5.0	4.7	-1.6	281	10.8	10.6	-2.1	279	23.5	23.2	-3.7	279	36.3	35.8	-5.8	273	29.5	29.5	-1.6	—	—	—	—			
6	313	2.3	1.7	-1.6	302	5.2	4.4	-2.7	281	13.5	13.3	-2.5	279	21.5	21.2	-3.3	276	28.3	28.1	-3.0	284	35.9	34.8	-8.8	287	25.7	24.6	-7.5			
7	315	4.4	3.1	-3.1	298	5.4	4.8	-2.5	285	12.8	12.3	-3.4	281	18.6	18.2	-3.6	277	28.6	28.4	-3.5	273	34.6	34.6	-1.6	279	12.7	12.6	-1.9			
8	293	5.6	5.2	-2.2	293	5.4	5.0	-2.1	283	13.6	13.3	-3.0	278	21.2	21.0	-2.8	282	27.7	27.1	-5.6	259	36.7	36.0	7.0	—	—	—	—			
9	309	5.0	3.9	-3.2	296	6.2	5.6	-2.7	283	11.8	11.5	-2.7	282	23.0	22.5	-4.7	271	32.3	32.3	-0.4	266	39.8	39.7	2.7	270	27.0	27.0	0.2			
10	297	3.1	2.8	-1.4	289	3.9	3.7	-1.3	277	11.7	11.6	-1.4	281	21.5	21.1	-4.0	271	31.6	31.6	-0.4	269	40.1	40.1	0.4	282	25.0	24.4	-5.3			
11	309	4.6	3.6	-2.9	288	6.7	6.4	-2.1	287	9.5	9.1	-2.8	279	22.8	22.5	-3.5	277	24.8	24.6	-3.2	282	30.8	30.2	-6.2	284	21.0	20.4	-5.1			
12	320	4.0	2.6	-3.1	298	5.8	5.1	-2.7	287	12.0	11.5	-3.5	282	21.0	20.6	-4.2	272	33.7	33.7	-0.9	272	37.0	37.0	-1.1	278	18.0	17.8	-2.6			
13	301	5.4	4.6	-2.8	289	6.4	6.0	-2.1	278	13.1	13.0	-1.8	280	22.0	21.7	-3.7	261	27.5	27.2	4.1	269	35.4	35.4	0.5	—	—	—	—			
14	308	4.4	3.5	-2.7	290	6.5	6.1	-2.2	284	11.8	11.5	-2.8	281	20.7	20.3	-3.9	288	28.3	26.9	-8.7	276	36.8	36.6	-3.9	—	—	—	—			
15	306	5.1	4.1	-3.0	299	6.3	5.5	-3.0	279	12.5	12.3	-2.0	287	21.0	20.1	-6.1	287	21.9	20.9	-6.5	284	31.5	30.5	-7.8	258	40.0	39.1	8.3			
16	310	5.5	4.2	-3.5	300	6.6	5.7	-3.3	284	13.4	13.0	-3.3	289	20.5	19.4	-6.5	287	33.0	31.6	-9.6	291	38.7	36.2	-13.6	294	21.9	20.1	-8.8			
17	309	6.3	4.9	-3.9	302	6.2	5.3	-3.3	279	10.6	10.5	-1.6	285	21.4	20.7	-5.4	279	33.3	32.9	-5.0	269	29.8	29.8	0.6	294	24.5	22.3	-10.1			
18	315	4.7	3.3	-3.3	291	6.6	6.2	-2.4	275	9.9	9.9	-0.8	280	19.8	19.5	-3.5	271	31.8	31.8	-0.5	275	35.8	35.6	-3.3	274	22.0	21.9	-1.5			
19	317	4.2	2.9	-3.1	305	5.1	4.2	-2.9	280	11.3	11.1	-1.9	282	19.1	18.7	-3.9	272	33.8	33.8	-1.1	278	36.9	36.5	-5.4	229	12.1	9.1	7.9			
20	315	5.5	3.9	-3.9	305	6.4	5.2	-3.7	278	11.8	11.7	-1.7	283	22.2	21.7	-4.9	274	31.5	31.4	-2.1	268	39.6	39.6	1.1	273	28.0	28.0	-1.5			
21	289	8.4	8.0	-2.7	297	7.2	6.4	-3.2	278	10.6	10.5	-1.4	281	18.8	18.5	-3.6	272	31.0	31.0	-1.2	262	50.5	50.0	6.9	—	—	—	—			
22	302	11.9	10.1	-6.3	308	6.6	5.2	-4.0	283	9.5	9.2	-2.2	285	21.7	21.0	-5.5	260	37.8	37.3	6.4	257	41.9	40.8	9.7	—	—	—	—			
23	316	5.5	3.8	-4.0	290	5.1	4.8	-1.7	272	10.2	10.2	-0.3	283	22.1	21.5	-5.1	281	32.8	32.2	-6.5	276	42.2	41.9	-4.6	—	—	—	—			
24	322	5.0	3.1	-3.9	312	6.3	4.7	-4.2	273	8.0	8.0	-0.4	278	23.4	23.2	-3.3	278	32.2	31.9	-4.5	287	44.4	42.5	-13.0	289	28.0	26.5	-9.1			
25	295	5.3	4.8	-2.2	294	5.2	4.8	-2.1	286	8.7	8.4	-2.4	281	18.0	17.7	-3.5	283	34.2	33.3	-7.8	276	36.3	36.1	-4.1	264	24.1	24.0	2.6			
26	313	3.3	2.4	-2.2	296	6.0	5.4	-2.6	273	9.1	9.1	-0.5	274	18.6	18.5	-1.4	281	28.0	27.5	-5.4	263	35.6	35.3	4.3	270	20.0	20.0	0.0			
27	314	4.7	3.4	-3.3	301	6.5	5.6	-3.3	274	9.4	9.4	-0.6	296	16.2	14.6	-7.1	282	27.0	26.4	-5.5	276	34.8	34.6	-3.5	193	9.2	2.0	9.0			
28	310	3.0	2.3	-1.9	300	5.2	4.5	-2.6	291	7.7	7.2	-2.8	296	16.5	14.8	-7.2	289	26.9	25.4	-8.8	276	33.1	32.9	-3.3	275	25.1	25.0	-2.2			
29	312	4.7	3.5	-3.1	304	5.9	4.9	-3.3	291	9.7	9.0	-3.5	292	17.2	15.9	-6.5	278	27.2	26.9	-3.8	258	31.9	31.2	6.8	282	23.1	22.6	-4.9			
30	288	3.5	3.3	-1.1	293	5.8	5.3	-2.3	288	10.3	9.8	-3.1	291	18.0	16.8	-6.4	286	25.4	24.4	-6.9	285	35.2	34.0	-9.2	308	14.4	11.3	-8.9			
31	325	2.9	1.7	-2.4	301	5.0	4.3	-2.6	295	8.9	8.0	-3.8	286	14.7	14.1	-4.1	283	21.3	20.7	-4.9	279	35.8	35.3	-5.9	291	22.8	21.3	-8.1			

Daily Normals of Upper Air Winds (1971-2000)

352

RANCHI

APRIL

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	320	3.3	2.1	-2.5	302	6.7	5.7	-3.6	277	9.4	9.3	-1.2	285	19.5	18.8	-5.2	286	28.0	27.0	-7.5	284	37.5	36.4	-9.2	268	10.9	10.9	0.4			
2	324	3.7	2.2	-3.0	294	5.4	4.9	-2.2	270	7.8	7.8	0.0	273	18.2	18.2	-1.0	271	29.3	29.3	-0.4	273	35.5	35.5	-1.8	287	24.4	23.3	-7.1			
3	285	3.0	2.9	-0.8	288	6.2	5.9	-1.9	281	9.7	9.5	-1.9	281	17.2	16.9	-3.2	265	36.4	36.3	3.0	264	49.8	49.5	5.3	276	33.0	32.8	-3.4			
4	298	2.4	2.1	-1.1	305	6.3	5.2	-3.6	278	9.2	9.1	-1.2	283	15.2	14.8	-3.4	264	36.8	36.6	3.6	269	41.7	41.7	0.4	277	45.0	44.7	-5.5			
5	285	3.5	3.4	-0.9	295	4.1	3.7	-1.7	281	7.5	7.4	-1.4	287	19.5	18.6	-5.7	268	35.3	35.3	1.0	281	46.4	45.5	-9.1	243	23.0	20.5	10.4			
6	302	4.4	3.7	-2.3	288	5.9	5.6	-1.8	286	9.0	8.6	-2.5	290	19.9	18.7	-6.7	275	30.2	30.1	-2.6	272	31.6	31.6	-1.2	300	7.0	6.1	-3.5			
7	319	5.3	3.5	-4.0	297	7.0	6.2	-3.2	301	11.4	9.7	-5.9	298	17.3	15.3	-8.0	287	28.3	27.0	-8.5	257	37.9	36.9	8.6	246	31.0	28.3	12.6			
8	302	4.9	4.1	-2.6	301	7.7	6.6	-3.9	292	8.8	8.2	-3.3	291	14.5	13.5	-5.3	282	29.1	28.4	-6.2	268	44.6	44.6	1.6	64	6.0	-5.4	-2.6			
9	67	0.8	-0.7	-0.3	283	5.7	5.5	-1.3	286	9.7	9.3	-2.6	285	16.6	16.1	-4.2	270	25.7	25.7	0.0	265	29.5	29.4	2.5	307	15.0	12.0	-9.0			
10	264	4.9	4.9	0.5	295	6.5	5.9	-2.7	278	9.9	9.8	-1.4	282	16.0	15.7	-3.2	272	24.5	24.5	-0.7	271	36.7	36.7	-0.9	289	17.5	16.5	-5.7			
11	311	4.5	3.4	-3.0	304	7.5	6.2	-4.2	283	8.8	8.6	-2.0	290	15.5	14.6	-5.2	286	26.0	25.0	-7.0	286	21.3	20.5	-5.9	268	7.0	7.0	0.3			
12	318	3.6	2.4	-2.7	321	7.1	4.5	-5.5	289	8.5	8.0	-2.8	287	15.5	14.8	-4.6	280	29.7	29.2	-5.2	251	28.7	27.1	9.5	250	13.0	12.2	4.4			
13	314	3.3	2.4	-2.3	303	5.6	4.7	-3.1	289	8.3	7.9	-2.7	286	16.8	16.2	-4.5	274	29.4	29.3	-2.0	283	30.1	29.3	-6.7	274	12.2	12.2	-0.8			
14	342	4.0	1.2	-3.8	316	6.3	4.4	-4.5	274	7.7	7.7	-0.5	286	16.6	16.0	-4.5	270	26.5	26.5	0.1	284	29.8	28.9	-7.2	269	18.8	18.8	0.3			
15	297	0.9	0.8	-0.4	311	5.3	4.0	-3.5	271	8.3	8.3	-0.1	281	15.5	15.2	-3.0	265	23.7	23.6	2.2	266	20.8	20.7	1.5	247	5.8	5.3	2.3			
16	255	2.7	2.6	0.7	290	4.5	4.2	-1.5	276	8.5	8.5	-0.9	279	17.8	17.6	-2.7	267	25.6	25.6	1.5	261	32.6	32.2	5.0	254	16.3	15.7	4.4			
17	305	3.7	3.0	-2.1	275	5.2	5.2	-0.5	280	7.2	7.1	-1.3	285	15.5	15.0	-4.0	268	28.8	28.8	0.9	260	28.0	27.6	5.0	240	11.8	10.2	5.9			
18	312	3.9	2.9	-2.6	305	5.4	4.4	-3.1	279	8.0	7.9	-1.3	292	16.2	15.0	-6.2	260	21.2	20.9	3.5	256	27.8	27.0	6.8	171	1.3	-0.2	1.3			
19	312	5.7	4.2	-3.8	303	6.3	5.3	-3.4	293	7.8	7.2	-3.0	283	14.9	14.5	-3.4	261	23.5	23.2	3.8	248	34.6	32.1	13.0	236	9.8	8.1	5.5			
20	301	5.1	4.4	-2.6	312	6.9	5.1	-4.6	297	7.0	6.2	-3.2	288	12.9	12.3	-3.9	276	20.6	20.5	-2.0	269	18.0	18.0	0.2	238	7.0	5.9	3.7			
21	296	5.5	4.9	-2.4	304	5.5	4.6	-3.1	291	8.9	8.3	-3.2	290	12.1	11.4	-4.2	264	21.5	21.4	2.1	254	28.4	27.4	7.6	280	11.3	11.1	-2.0			
22	277	10.3	10.2	-1.3	308	6.1	4.8	-3.7	291	7.0	6.5	-2.5	277	14.4	14.3	-1.8	265	26.3	26.2	2.2	248	14.9	13.9	5.5	260	13.7	13.5	2.3			
23	166	0.4	-0.1	0.4	276	3.7	3.7	-0.4	305	7.5	6.2	-4.3	294	14.4	13.1	-5.9	282	26.9	26.4	-5.4	280	32.6	32.1	-5.6	310	11.4	8.7	-7.3			
24	307	2.0	1.6	-1.2	302	5.2	4.4	-2.8	292	7.1	6.6	-2.6	286	12.2	11.7	-3.4	276	23.9	23.8	-2.4	276	25.6	25.5	-2.6	265	11.5	11.5	1.0			
25	296	2.8	2.5	-1.2	296	5.0	4.5	-2.2	295	7.0	6.3	-3.0	288	11.6	11.1	-3.5	263	23.7	23.5	2.9	273	21.4	21.4	-1.3	265	6.0	6.0	0.5			
26	260	1.1	1.1	0.2	277	2.5	2.5	-0.3	284	7.7	7.5	-1.9	297	13.5	12.0	-6.2	283	20.4	19.9	-4.6	270	31.4	31.4	-0.1	286	19.1	18.4	-5.2			
27	221	2.3	1.5	1.7	286	3.2	3.1	-0.9	289	8.4	8.0	-2.7	292	12.2	11.3	-4.6	274	19.3	19.2	-1.5	253	25.0	23.9	7.4	256	11.7	11.4	2.8			
28	309	3.8	3.0	-2.4	321	4.4	2.8	-3.4	300	8.7	7.5	-4.4	293	11.3	10.4	-4.4	273	19.2	19.2	-1.0	259	27.9	27.4	5.1	261	6.8	6.7	1.1			
29	273	1.7	1.7	-0.1	305	3.5	2.9	-2.0	313	8.4	6.2	-5.7	306	14.0	11.3	-8.3	294	20.3	18.6	-8.1	274	15.1	15.1	-1.0	279	2.6	2.6	-0.4			
30	274	1.5	1.5	-0.1	289	3.6	3.4	-1.2	305	8.3	6.8	-4.7	297	12.3	10.9	-5.6	277	22.8	22.6	-2.8	280	23.5	23.2	-3.9	272	14.4	14.4	-0.5			

Daily Normals of Upper Air Winds (1971-2000)

RANCHI

MAY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	5	1.1	-0.1	-1.1	299	4.1	3.6	-2.0	296	7.4	6.7	-3.2	297	10.2	9.1	-4.7	294	23.6	21.6	-9.4	274	22.8	22.8	-1.5	262	8.3	8.2	1.1			
2	276	1.9	1.9	-0.2	300	5.1	4.4	-2.5	303	7.2	6.0	-3.9	292	12.4	11.5	-4.7	267	22.6	22.6	1.0	265	21.7	21.6	1.8	264	4.8	4.8	0.5			
3	211	2.7	1.4	2.3	288	2.8	2.7	-0.9	313	9.6	7.0	-6.6	294	13.5	12.4	-5.4	264	17.5	17.4	1.8	265	15.5	15.4	1.3	215	3.7	2.1	3.0			
4	93	1.8	-1.8	0.1	322	3.4	2.1	-2.7	303	8.2	6.9	-4.4	289	11.7	11.1	-3.8	271	17.4	17.4	-0.4	266	22.1	22.0	1.5	273	8.9	8.9	-0.5			
5	235	1.6	1.3	0.9	299	3.7	3.2	-1.8	306	7.1	5.7	-4.2	295	13.4	12.1	-5.7	261	24.0	23.7	3.7	237	25.2	21.2	13.7	237	10.8	9.0	5.9			
6	293	2.1	1.9	-0.8	301	3.3	2.8	-1.7	301	6.4	5.5	-3.3	316	13.0	9.1	-9.3	264	15.5	15.4	1.5	267	23.6	23.6	1.4	276	5.0	5.0	-0.5			
7	278	1.4	1.4	-0.2	314	3.5	2.5	-2.4	294	7.0	6.4	-2.9	299	12.8	11.2	-6.1	264	18.3	18.2	1.9	249	20.4	19.1	7.3	279	4.6	4.5	-0.7			
8	284	0.8	0.8	-0.2	329	4.3	2.2	-3.7	298	8.1	7.1	-3.8	308	11.5	9.1	-7.0	268	18.2	18.2	0.5	265	22.5	22.4	1.9	27	1.8	-0.8	-1.6			
9	146	2.9	-1.6	2.4	317	2.5	1.7	-1.8	292	7.0	6.5	-2.6	292	12.8	11.9	-4.7	267	19.8	19.8	0.9	256	23.4	22.7	5.8	38	14.0	-8.6	-11.0			
10	278	0.7	0.7	-0.1	307	2.6	2.1	-1.6	287	6.4	6.1	-1.9	285	13.7	13.2	-3.5	259	17.7	17.4	3.4	256	17.5	17.0	4.2	256	1.6	1.6	0.4			
11	315	3.1	2.2	-2.2	319	4.4	2.9	-3.3	296	7.8	7.0	-3.4	279	12.7	12.6	-1.9	269	15.7	15.7	0.4	263	16.4	16.3	2.1	257	8.7	8.5	2.0			
12	76	0.8	-0.8	-0.2	293	0.8	0.7	-0.3	314	5.7	4.1	-3.9	289	10.8	10.2	-3.5	282	16.7	16.3	-3.6	280	12.0	11.8	-2.0	74	13.0	-12.5	-3.6			
13	11	0.5	-0.1	-0.5	345	4.1	1.1	-4.0	320	8.0	5.1	-6.1	293	11.9	10.9	-4.7	275	16.0	15.9	-1.4	252	12.1	11.5	3.8	103	1.8	-1.8	0.4			
14	275	2.1	2.1	-0.2	304	3.2	2.7	-1.8	307	6.6	5.3	-4.0	287	11.0	10.5	-3.3	271	19.8	19.8	-0.3	242	10.1	8.9	4.8	205	1.9	0.8	1.7			
15	344	0.7	0.2	-0.7	311	2.1	1.6	-1.4	307	6.4	5.1	-3.8	297	10.5	9.4	-4.7	262	16.0	15.9	2.1	247	11.1	10.2	4.4	350	3.4	0.6	-3.3			
16	311	1.8	1.4	-1.2	304	2.9	2.4	-1.6	305	7.8	6.4	-4.5	290	14.1	13.2	-4.9	257	16.5	16.1	3.6	244	20.7	18.5	9.2	182	6.6	0.2	6.6			
17	221	1.8	1.2	1.4	301	5.4	4.6	-2.8	289	9.4	8.9	-3.0	294	10.9	9.9	-4.5	264	14.7	14.6	1.6	245	14.3	12.9	6.1	231	5.1	4.0	3.2			
18	266	1.3	1.3	0.1	300	1.4	1.2	-0.7	310	7.6	5.8	-4.9	305	10.8	8.8	-6.2	261	16.3	16.1	2.5	241	18.1	15.9	8.7	172	4.9	-0.7	4.9			
19	24	2.2	-0.9	-2.0	320	5.2	3.3	-4.0	313	9.1	6.7	-6.2	305	12.3	10.0	-7.1	260	14.0	13.8	2.5	252	15.9	15.1	4.9	142	4.3	-2.7	3.4			
20	322	3.4	2.1	-2.7	334	3.9	1.7	-3.5	319	9.1	6.0	-6.9	303	9.6	8.1	-5.2	259	11.7	11.5	2.2	230	9.9	7.6	6.4	11	2.1	-0.4	-2.1			
21	309	1.4	1.1	-0.9	327	3.0	1.6	-2.5	304	6.4	5.3	-3.6	297	8.9	7.9	-4.0	268	9.4	9.4	0.3	230	14.4	11.0	9.3	50	4.8	-3.7	-3.1			
22	349	1.0	0.2	-1.0	333	2.8	1.3	-2.5	317	6.6	4.5	-4.8	293	8.3	7.6	-3.3	245	10.4	9.4	4.4	250	8.2	7.7	2.8	75	3.0	-2.9	-0.8			
23	355	2.2	0.2	-2.2	333	3.6	1.6	-3.2	319	8.8	5.8	-6.6	305	10.0	8.2	-5.7	247	10.3	9.5	4.1	220	11.3	7.2	8.7	98	3.5	-3.5	0.5			
24	306	1.7	1.4	-1.0	329	4.1	2.1	-3.5	313	8.1	5.9	-5.5	311	8.3	6.3	-5.4	239	8.5	7.3	4.4	211	9.6	4.9	8.3	126	7.7	-6.2	4.5			
25	318	1.2	0.8	-0.9	327	5.6	3.1	-4.7	314	7.8	5.6	-5.5	304	9.4	7.8	-5.3	247	8.3	7.7	3.2	225	8.6	6.1	6.1	115	8.9	-8.0	3.8			
26	290	2.9	2.7	-1.0	306	4.2	3.4	-2.5	313	6.7	4.9	-4.6	309	9.4	7.3	-5.9	259	10.9	10.7	2.1	220	11.9	7.6	9.2	163	5.1	-1.5	4.9			
27	335	1.4	0.6	-1.3	310	5.2	4.0	-3.3	299	7.8	6.8	-3.8	295	9.4	8.5	-4.0	269	10.3	10.3	0.2	227	12.2	9.0	8.3	148	6.2	-3.3	5.3			
28	291	1.9	1.8	-0.7	315	4.8	3.4	-3.4	305	8.7	7.1	-5.0	301	12.0	10.3	-6.1	257	9.6	9.3	2.2	238	8.7	7.4	4.6	166	2.9	-0.7	2.8			
29	245	2.1	1.9	0.9	331	3.3	1.6	-2.9	304	10.4	8.6	-5.9	299	13.4	11.7	-6.5	268	12.4	12.4	0.4	214	7.0	3.9	5.8	132	6.4	-4.7	4.3			
30	223	1.6	1.1	1.2	304	5.4	4.5	-3.0	304	8.3	6.9	-4.7	292	11.4	10.6	-4.3	261	10.4	10.3	1.7	239	10.4	8.9	5.3	154	9.3	-4.1	8.4			
31	243	3.3	2.9	1.5	301	3.9	3.3	-2.0	314	6.9	5.0	-4.8	300	8.7	7.5	-4.4	258	9.5	9.3	2.0	228	10.7	7.9	7.2	174	4.6	-0.5	4.6			

Daily Normals of Upper Air Winds (1971-2000)

RANCHI

JUNE

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	297	1.3	1.2	-0.6	306	4.6	3.7	-2.7	323	7.6	4.6	-6.0	285	7.7	7.4	-2.0	260	10.0	9.8	1.8	226	9.5	6.8	6.6	154	7.1	-3.1	6.4
2	287	2.4	2.3	-0.7	304	6.4	5.3	-3.6	298	7.4	6.5	-3.5	282	11.0	10.8	-2.2	271	10.4	10.4	-0.1	229	4.5	3.4	3.0	116	8.2	-7.4	3.6
3	231	1.3	1.0	0.8	317	3.3	2.2	-2.4	311	6.0	4.5	-3.9	287	9.1	8.7	-2.6	249	8.5	7.9	3.0	246	11.3	10.3	4.6	143	5.5	-3.3	4.4
4	174	1.0	-0.1	1.0	325	2.4	1.4	-2.0	314	7.1	5.1	-5.0	279	7.5	7.4	-1.2	261	7.4	7.3	1.2	219	9.1	5.7	7.1	124	3.2	-2.7	1.8
5	217	1.0	0.6	0.8	353	0.8	0.1	-0.8	335	4.7	2.0	-4.3	307	5.9	4.7	-3.5	252	7.2	6.9	2.2	226	8.8	6.3	6.1	126	6.1	-4.9	3.6
6	245	2.1	1.9	0.9	303	2.0	1.7	-1.1	303	5.9	4.9	-3.2	295	7.2	6.5	-3.0	233	4.6	3.7	2.8	208	5.1	2.4	4.5	89	5.1	-5.1	-0.1
7	255	2.3	2.2	0.6	295	2.1	1.9	-0.9	308	8.0	6.3	-4.9	299	8.8	7.7	-4.3	277	5.2	5.2	-0.6	194	3.0	0.7	2.9	123	5.6	-4.7	3.0
8	124	1.1	-0.9	0.6	246	1.0	0.9	0.4	299	4.9	4.3	-2.4	290	6.1	5.7	-2.1	272	6.8	6.8	-0.2	120	2.0	-1.7	1.0	90	10.7	-10.7	0.0
9	239	2.7	2.3	1.4	312	2.7	2.0	-1.8	317	6.9	4.7	-5.0	291	5.8	5.4	-2.1	277	4.6	4.6	-0.6	119	3.8	-3.3	1.8	80	12.1	-11.9	-2.0
10	277	0.8	0.8	-0.1	324	2.7	1.6	-2.2	330	6.7	3.3	-5.8	330	4.4	2.2	-3.8	281	5.3	5.2	-1.0	135	2.0	-1.4	1.4	117	8.9	-8.0	4.0
11	32	0.9	-0.5	-0.8	315	3.7	2.6	-2.6	314	6.2	4.5	-4.3	315	4.1	2.9	-2.9	339	1.4	0.5	-1.3	162	0.6	-0.2	0.6	95	8.4	-8.4	0.8
12	203	2.1	0.8	1.9	293	2.3	2.1	-0.9	310	5.0	3.8	-3.2	301	4.8	4.1	-2.5	322	2.3	1.4	-1.8	150	1.6	-0.8	1.4	95	14.0	-13.9	1.2
13	133	3.4	-2.5	2.3	108	1.6	-1.5	0.5	327	3.1	1.7	-2.6	344	3.2	0.9	-3.1	219	2.2	1.4	1.7	229	3.8	2.9	2.5	93	11.8	-11.8	0.6
14	167	0.9	-0.2	0.9	323	3.0	1.8	-2.4	319	6.3	4.1	-4.8	314	2.9	2.1	-2.0	293	1.3	1.2	-0.5	215	5.6	3.2	4.6	92	3.0	-3.0	0.1
15	167	1.8	-0.4	1.8	297	1.8	1.6	-0.8	311	5.0	3.8	-3.3	315	3.0	2.1	-2.1	233	3.0	2.4	1.8	192	3.0	0.6	2.9	104	10.9	-10.6	2.6
16	170	1.1	-0.2	1.1	303	2.0	1.7	-1.1	323	4.4	2.6	-3.5	289	2.1	2.0	-0.7	169	0.5	-0.1	0.5	107	4.2	-4.0	1.2	93	10.3	-10.3	0.5
17	241	3.7	3.2	1.8	261	1.3	1.3	0.2	328	2.5	1.3	-2.1	294	2.2	2.0	-0.9	356	1.5	0.1	-1.5	115	5.1	-4.6	2.1	110	8.4	-7.9	2.8
18	142	2.4	-1.5	1.9	127	1.0	-0.8	0.6	288	0.3	0.3	-0.1	328	0.9	0.5	-0.8	113	2.5	-2.3	1.0	128	6.6	-5.2	4.0	90	18.2	-18.2	0.0
19	245	1.4	1.3	0.6	299	1.0	0.9	-0.5	292	3.7	3.4	-1.4	270	3.5	3.5	0.0	72	1.9	-1.8	-0.6	101	7.0	-6.9	1.3	77	14.4	-14.0	-3.3
20	195	1.6	0.4	1.5	37	1.0	-0.6	-0.8	334	2.5	1.1	-2.3	242	1.5	1.3	0.7	86	4.2	-4.2	-0.3	100	13.5	-13.3	2.3	64	17.3	-15.6	-7.5
21	193	2.2	0.5	2.1	346	0.8	0.2	-0.8	347	4.5	1.0	-4.4	39	1.4	-0.9	-1.1	67	5.7	-5.3	-2.2	106	7.9	-7.6	2.2	74	20.1	-19.3	-5.5
22	180	1.6	0.0	1.6	339	1.7	0.6	-1.6	344	4.0	1.1	-3.8	16	4.3	-1.2	-4.1	99	3.6	-3.6	0.6	97	8.6	-8.5	1.0	77	15.8	-15.4	-3.6
23	286	2.5	2.4	-0.7	310	3.5	2.7	-2.3	325	3.7	2.1	-3.0	36	1.4	-0.8	-1.1	181	4.7	0.1	4.7	93	6.2	-6.2	0.3	82	20.6	-20.4	-2.8
24	279	2.5	2.5	-0.4	337	0.8	0.3	-0.7	338	2.7	1.0	-2.5	138	1.2	-0.8	0.9	81	4.0	-4.0	-0.6	95	10.1	-10.1	0.9	90	20.7	-20.7	-0.1
25	253	3.4	3.3	1.0	256	1.6	1.6	0.4	338	2.2	0.8	-2.0	11	2.6	-0.5	-2.6	84	7.1	-7.1	-0.8	93	9.5	-9.5	0.5	85	22.0	-21.9	-2.0
26	207	0.4	0.2	0.4	211	1.2	0.6	1.0	15	1.1	-0.3	-1.1	44	3.5	-2.4	-2.5	83	7.7	-7.6	-1.0	83	8.2	-8.1	-1.0	83	21.1	-20.9	-2.6
27	163	1.7	-0.5	1.6	45	1.0	-0.7	-0.7	12	1.4	-0.3	-1.4	101	1.0	-1.0	0.2	88	7.0	-7.0	-0.3	84	11.4	-11.3	-1.2	81	18.0	-17.8	-2.7
28	214	1.4	0.8	1.2	258	2.9	2.8	0.6	285	3.1	3.0	-0.8	131	1.1	-0.8	0.7	94	5.7	-5.7	0.4	81	13.6	-13.4	-2.2	76	21.7	-21.1	-5.1
29	235	1.2	1.0	0.7	302	3.9	3.3	-2.1	298	4.1	3.6	-1.9	318	1.2	0.8	-0.9	99	6.0	-5.9	0.9	85	14.3	-14.2	-1.2	72	19.2	-18.2	-6.0
30	279	1.3	1.3	-0.2	288	5.9	5.6	-1.8	298	5.8	5.1	-2.7	294	2.7	2.5	-1.1	83	4.7	-4.7	-0.6	87	12.6	-12.6	-0.7	75	24.0	-23.2	-6.0

Daily Normals of Upper Air Winds (1971-2000)

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RANCHI

JULY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	243	1.8	1.6	0.8	299	4.8	4.2	-2.3	311	6.6	5.0	-4.3	325	2.4	1.4	-2.0	66	3.5	-3.2	-1.4	98	11.7	-11.6	1.7	85	24.9	-24.8	-2.3			
2	—	—	—	—	292	1.6	1.5	-0.6	309	4.0	3.1	-2.5	51	2.6	-2.0	-1.6	99	8.7	-8.6	1.4	103	15.3	-14.9	3.5	81	25.3	-25.0	-3.8			
3	190	2.7	0.5	2.7	317	1.8	1.2	-1.3	328	3.6	1.9	-3.0	39	0.6	-0.4	-0.5	95	5.5	-5.5	0.5	103	9.4	-9.2	2.1	58	36.0	-30.5	-19.1			
4	200	2.0	0.7	1.9	240	2.4	2.1	1.2	260	2.2	2.2	0.4	14	1.6	-0.4	-1.6	88	7.6	-7.6	-0.2	79	10.9	-10.7	-2.0	81	23.9	-23.6	-3.7			
5	240	2.2	1.9	1.1	297	4.5	4.0	-2.0	293	5.1	4.7	-2.0	96	0.9	-0.9	0.1	86	5.3	-5.3	-0.4	86	13.0	-13.0	-1.0	86	20.3	-20.2	-1.5			
6	213	3.3	1.8	2.8	283	2.8	2.7	-0.6	306	1.7	1.4	-1.0	320	1.7	1.1	-1.3	83	4.7	-4.7	-0.6	86	14.9	-14.9	-1.1	72	34.0	-32.3	-10.5			
7	228	1.2	0.9	0.8	278	0.7	0.7	-0.1	7	1.6	-0.2	-1.6	77	1.3	-1.3	-0.3	100	5.0	-4.9	0.9	91	16.2	-16.2	0.3	69	29.5	-27.5	-10.8			
8	238	1.9	1.6	1.0	207	0.2	0.1	0.2	63	2.0	-1.8	-0.9	95	3.3	-3.3	0.3	88	7.9	-7.9	-0.3	83	10.8	-10.7	-1.4	49	27.1	-20.4	-17.8			
9	218	1.6	1.0	1.3	290	1.2	1.1	-0.4	285	1.1	1.1	-0.3	315	0.4	0.3	-0.3	89	6.5	-6.5	-0.1	91	10.3	-10.3	0.1	67	20.8	-19.2	-8.0			
10	223	1.6	1.1	1.2	292	1.1	1.0	-0.4	158	1.1	-0.4	1.0	97	3.3	-3.3	0.4	99	6.2	-6.1	1.0	105	13.2	-12.7	3.5	55	24.9	-20.5	-14.1			
11	225	1.7	1.2	1.2	141	3.3	-2.1	2.6	125	2.9	-2.4	1.7	109	4.0	-3.8	1.3	84	5.5	-5.5	-0.6	64	11.3	-10.1	-5.0	70	23.9	-22.5	-8.0			
12	214	2.2	1.2	1.8	190	1.1	0.2	1.1	253	1.4	1.3	0.4	105	4.3	-4.2	1.1	98	6.8	-6.7	1.0	86	10.6	-10.6	-0.8	79	22.3	-21.9	-4.2			
13	229	1.8	1.4	1.2	256	0.8	0.8	0.2	310	1.6	1.2	-1.0	68	2.2	-2.0	-0.8	115	5.2	-4.7	2.2	85	14.7	-14.6	-1.4	83	31.0	-30.8	-3.8			
14	257	1.3	1.3	0.3	298	1.5	1.3	-0.7	270	0.4	0.4	0.0	77	3.1	-3.0	-0.7	97	8.1	-8.0	1.0	70	14.2	-13.3	-4.9	67	24.0	-22.2	-9.2			
15	225	1.7	1.2	1.2	306	2.7	2.2	-1.6	268	2.3	2.3	0.1	294	1.0	0.9	-0.4	86	5.9	-5.9	-0.4	72	13.1	-12.5	-4.0	74	25.4	-24.4	-7.1			
16	275	1.1	1.1	-0.1	232	1.1	0.9	0.7	223	1.8	1.2	1.3	175	2.2	-0.2	2.2	75	7.3	-7.0	-1.9	81	14.0	-13.8	-2.2	90	18.1	-18.1	0.1			
17	214	2.2	1.2	1.8	321	1.4	0.9	-1.1	8	1.4	-0.2	-1.4	73	2.1	-2.0	-0.6	92	9.3	-9.3	0.4	81	12.1	-12.0	-1.9	77	23.6	-23.0	-5.5			
18	186	0.9	0.1	0.9	252	2.2	2.1	0.7	225	0.6	0.4	0.4	85	3.3	-3.3	-0.3	80	6.6	-6.5	-1.1	58	8.6	-7.3	-4.5	75	22.1	-21.3	-5.8			
19	261	0.6	0.6	0.1	276	1.0	1.0	-0.1	215	1.6	0.9	1.3	64	2.8	-2.5	-1.2	68	5.2	-4.8	-1.9	88	11.9	-11.9	-0.4	69	22.9	-21.4	-8.1			
20	210	0.8	0.4	0.7	245	2.9	2.6	1.2	283	1.8	1.8	-0.4	11	2.0	-0.4	-2.0	65	5.1	-4.6	-2.1	66	11.1	-10.2	-4.5	87	24.5	-24.5	-1.2			
21	223	2.5	1.7	1.8	135	0.7	-0.5	0.5	121	1.2	-1.0	0.6	231	1.3	1.0	0.8	92	7.3	-7.3	0.3	81	11.3	-11.2	-1.7	92	16.3	-16.3	0.6			
22	246	2.2	2.0	0.9	216	2.2	1.3	1.8	243	1.1	1.0	0.5	97	1.6	-1.6	0.2	73	6.7	-6.4	-2.0	59	15.7	-13.5	-8.0	94	26.4	-26.3	1.7			
23	111	0.9	-0.8	0.3	245	1.7	1.5	0.7	254	0.7	0.7	0.2	124	2.2	-1.8	1.2	87	6.6	-6.6	-0.3	79	13.6	-13.4	-2.5	87	24.7	-24.7	-1.5			
24	180	0.5	0.0	0.5	238	1.5	1.3	0.8	262	1.5	1.5	0.2	45	1.4	-1.0	-1.0	88	8.9	-8.9	-0.3	82	17.1	-16.9	-2.3	83	30.7	-30.4	-4.0			
25	295	2.1	1.9	-0.9	273	1.9	1.9	-0.1	225	0.6	0.4	0.4	67	1.3	-1.2	-0.5	87	6.8	-6.8	-0.4	102	15.3	-14.9	3.3	88	29.3	-29.3	-0.8			
26	275	2.4	2.4	-0.2	266	3.0	3.0	0.2	253	1.7	1.6	0.5	34	2.3	-1.3	-1.9	76	8.9	-8.6	-2.1	90	12.8	-12.8	0.1	80	24.4	-24.1	-4.1			
27	173	1.7	-0.2	1.7	202	0.5	0.2	0.5	324	0.9	0.5	-0.7	135	2.5	-1.8	1.8	74	7.1	-6.8	-1.9	85	17.3	-17.2	-1.6	78	22.9	-22.4	-4.9			
28	180	0.3	0.0	0.3	264	1.8	1.8	0.2	253	1.4	1.3	0.4	98	4.4	-4.4	0.6	83	11.5	-11.4	-1.4	86	14.6	-14.6	-1.0	80	22.9	-22.5	-4.1			
29	164	0.7	-0.2	0.7	153	1.8	-0.8	1.6	146	3.0	-1.7	2.5	97	4.3	-4.3	0.5	88	11.0	-11.0	-0.4	88	18.5	-18.5	-0.5	82	23.2	-22.9	-3.4			
30	152	2.6	-1.2	2.3	119	1.0	-0.9	0.5	127	1.5	-1.2	0.9	103	4.4	-4.3	1.0	82	11.6	-11.5	-1.7	90	17.3	-17.3	-0.1	70	23.3	-21.9	-8.1			
31	135	0.4	-0.3	0.3	153	0.9	-0.4	0.8	96	1.0	-1.0	0.1	101	2.6	-2.6	0.5	110	7.9	-7.4	2.7	87	13.1	-13.1	-0.8	74	25.6	-24.6	-7.2			

Daily Normals of Upper Air Winds (1971-2000)

RANCHI

AUGUST

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	202	0.5	0.2	0.5	107	1.0	-1.0	0.3	62	1.5	-1.3	-0.7	78	3.5	-3.4	-0.7	64	8.3	-7.5	-3.6	58	15.3	-13.0	-8.1	63	24.4	-21.7	-11.1
2	204	1.2	0.5	1.1	130	0.8	-0.6	0.5	85	1.2	-1.2	-0.1	53	4.4	-3.5	-2.6	70	7.2	-6.8	-2.5	61	13.8	-12.1	-6.7	79	20.4	-20.0	-3.9
3	191	2.6	0.5	2.6	139	0.9	-0.6	0.7	107	2.8	-2.7	0.8	25	1.7	-0.7	-1.5	68	5.9	-5.5	-2.2	67	9.2	-8.5	-3.6	74	24.2	-23.3	-6.5
4	191	1.0	0.2	1.0	252	3.6	3.4	1.1	212	0.9	0.5	0.8	86	3.2	-3.2	-0.2	69	9.7	-9.0	-3.5	61	9.4	-8.2	-4.5	82	26.3	-26.1	-3.5
5	262	2.1	2.1	0.3	274	1.4	1.4	-0.1	225	0.8	0.6	0.6	49	3.0	-2.3	-2.0	52	7.8	-6.1	-4.8	72	10.3	-9.8	-3.1	71	19.9	-18.8	-6.5
6	236	2.5	2.1	1.4	280	4.2	4.1	-0.7	270	0.2	0.2	0.0	72	4.7	-4.5	-1.5	87	10.7	-10.7	-0.5	76	14.8	-14.4	-3.6	78	24.5	-24.0	-4.9
7	248	2.4	2.2	0.9	256	0.8	0.8	0.2	79	3.2	-3.1	-0.6	75	6.7	-6.5	-1.8	82	11.5	-11.4	-1.6	80	15.0	-14.8	-2.7	80	23.7	-23.4	-4.0
8	279	1.8	1.8	-0.3	207	0.9	0.4	0.8	58	1.3	-1.1	-0.7	79	5.1	-5.0	-1.0	84	9.5	-9.4	-1.0	79	12.8	-12.6	-2.5	69	20.5	-19.1	-7.5
9	157	2.3	-0.9	2.1	192	1.9	0.4	1.9	134	2.9	-2.1	2.0	97	3.5	-3.5	0.4	91	8.1	-8.1	0.2	78	16.7	-16.3	-3.6	81	21.7	-21.4	-3.3
10	135	1.7	-1.2	1.2	141	3.2	-2.0	2.5	141	4.0	-2.5	3.1	100	2.8	-2.8	0.5	83	6.5	-6.5	-0.8	79	12.8	-12.6	-2.5	78	23.1	-22.6	-4.7
11	180	1.8	0.0	1.8	193	3.2	0.7	3.1	182	2.5	0.1	2.5	196	0.7	0.2	0.7	87	5.3	-5.3	-0.3	76	12.4	-12.0	-3.0	78	24.9	-24.3	-5.3
12	254	1.8	1.7	0.5	270	1.7	1.7	0.0	283	1.7	1.7	-0.4	27	0.7	-0.3	-0.6	79	3.8	-3.7	-0.7	77	9.7	-9.4	-2.2	74	22.4	-21.6	-6.1
13	263	1.7	1.7	0.2	288	1.6	1.5	-0.5	279	1.3	1.3	-0.2	11	1.0	-0.2	-1.0	99	6.1	-6.0	0.9	77	10.1	-9.8	-2.3	69	18.3	-17.1	-6.6
14	250	1.5	1.4	0.5	135	0.1	-0.1	0.1	315	1.0	0.7	-0.7	343	1.0	0.3	-1.0	85	5.0	-5.0	-0.4	85	15.3	-15.2	-1.4	86	18.9	-18.9	-1.3
15	276	0.9	0.9	-0.1	45	0.4	-0.3	-0.3	153	0.2	-0.1	0.2	104	2.9	-2.8	0.7	101	8.1	-7.9	1.6	79	12.1	-11.9	-2.4	90	20.1	-20.1	-0.1
16	314	2.9	2.1	-2.0	346	0.8	0.2	-0.8	163	1.7	-0.5	1.6	111	3.0	-2.8	1.1	93	6.8	-6.8	0.4	107	12.3	-11.8	3.6	75	9.6	-9.3	-2.5
17	117	4.9	-4.4	2.2	135	1.0	-0.7	0.7	97	2.5	-2.5	0.3	69	3.9	-3.6	-1.4	88	9.2	-9.2	-0.4	86	14.8	-14.8	-1.0	80	19.9	-19.6	-3.6
18	134	2.9	-2.1	2.0	104	2.5	-2.4	0.6	102	3.4	-3.3	0.7	103	4.3	-4.2	1.0	91	7.3	-7.3	0.1	80	11.3	-11.1	-2.0	74	20.3	-19.5	-5.7
19	189	0.6	0.1	0.6	123	2.7	-2.3	1.5	126	2.6	-2.1	1.5	97	4.2	-4.2	0.5	87	8.7	-8.7	-0.4	82	9.5	-9.4	-1.4	82	20.5	-20.3	-2.9
20	186	0.9	0.1	0.9	180	1.1	0.0	1.1	169	1.6	-0.3	1.6	115	2.1	-1.9	0.9	76	5.4	-5.2	-1.3	96	9.3	-9.3	0.9	80	20.7	-20.4	-3.5
21	126	1.7	-1.4	1.0	144	1.4	-0.8	1.1	129	2.1	-1.6	1.3	135	0.3	-0.2	0.2	85	5.8	-5.8	-0.5	84	14.9	-14.8	-1.6	82	23.0	-22.8	-3.1
22	193	1.8	0.4	1.8	189	1.2	0.2	1.2	270	0.2	0.2	0.0	125	1.6	-1.3	0.9	92	3.4	-3.4	0.1	80	6.2	-6.1	-1.1	84	19.7	-19.6	-2.0
23	191	0.5	0.1	0.5	216	2.9	1.7	2.3	196	2.5	0.7	2.4	151	2.3	-1.1	2.0	86	1.4	-1.4	-0.1	82	9.1	-9.0	-1.3	93	14.7	-14.7	0.8
24	126	1.4	-1.1	0.8	257	2.6	2.5	0.6	254	3.7	3.6	1.0	260	2.2	2.2	0.4	90	3.6	-3.6	0.0	99	11.2	-11.1	1.7	82	22.5	-22.3	-3.1
25	360	0.1	0.0	-0.1	268	2.5	2.5	0.1	276	3.0	3.0	-0.3	18	1.6	-0.5	-1.5	76	6.4	-6.2	-1.5	113	11.3	-10.4	4.5	93	22.6	-22.6	1.2
26	94	1.6	-1.6	0.1	17	2.1	-0.6	-2.0	13	0.9	-0.2	-0.9	46	3.2	-2.3	-2.2	65	7.6	-6.9	-3.2	87	15.4	-15.4	-0.8	86	18.8	-18.7	-1.4
27	100	1.1	-1.1	0.2	22	3.2	-1.2	-3.0	70	3.3	-3.1	-1.1	95	6.4	-6.4	0.6	108	9.7	-9.2	3.0	94	12.8	-12.8	0.9	93	20.8	-20.8	1.0
28	80	1.1	-1.1	-0.2	119	1.8	-1.6	0.9	112	2.9	-2.7	1.1	110	4.4	-4.1	1.5	94	6.6	-6.6	0.5	99	9.2	-9.1	1.4	80	15.8	-15.6	-2.7
29	148	1.5	-0.8	1.3	149	2.1	-1.1	1.8	135	1.6	-1.1	1.1	116	3.2	-2.9	1.4	108	4.8	-4.6	1.5	104	10.5	-10.2	2.5	82	16.6	-16.4	-2.3
30	233	1.5	1.2	0.9	199	1.8	0.6	1.7	170	1.1	-0.2	1.1	352	0.7	0.1	-0.7	99	2.0	-2.0	0.3	91	9.8	-9.8	0.2	79	16.9	-16.6	-3.3
31	159	2.2	-0.8	2.1	157	1.5	-0.6	1.4	122	0.9	-0.8	0.5	98	2.2	-2.2	0.3	114	4.3	-3.9	1.7	79	10.6	-10.4	-2.0	89	19.4	-19.4	-0.5

Daily Normals of Upper Air Winds (1971-2000)

RANCHI

SEPTEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	184	1.6	0.1	1.6	184	1.6	0.1	1.6	117	1.3	-1.2	0.6	124	2.7	-2.2	1.5	85	3.6	-3.6	-0.3	71	4.6	-4.3	-1.5	88	18.7	-18.7	-0.7
2	67	0.8	-0.7	-0.3	153	2.0	-0.9	1.8	141	1.9	-1.2	1.5	128	1.1	-0.9	0.7	112	6.3	-5.8	2.4	110	7.5	-7.0	2.6	93	17.5	-17.5	1.0
3	219	0.6	0.4	0.5	315	0.6	0.4	-0.4	315	1.0	0.7	-0.7	112	1.1	-1.0	0.4	110	6.3	-5.9	2.1	99	10.0	-9.9	1.6	77	19.2	-18.7	-4.4
4	153	2.7	-1.2	2.4	287	1.7	1.6	-0.5	275	1.1	1.1	-0.1	127	0.5	-0.4	0.3	54	2.6	-2.1	-1.5	98	12.6	-12.5	1.7	84	18.0	-17.9	-1.8
5	125	1.6	-1.3	0.9	342	0.9	0.3	-0.9	171	0.6	-0.1	0.6	118	1.5	-1.3	0.7	99	7.7	-7.6	1.2	84	10.9	-10.8	-1.1	91	17.7	-17.7	0.2
6	111	2.2	-2.1	0.8	109	1.8	-1.7	0.6	207	0.2	0.1	0.2	43	2.2	-1.5	-1.6	221	0.9	0.6	0.7	108	7.0	-6.6	2.2	69	13.3	-12.4	-4.8
7	148	1.9	-1.0	1.6	270	0.2	0.2	0.0	189	0.6	0.1	0.6	98	3.5	-3.5	0.5	95	4.5	-4.5	0.4	106	4.4	-4.2	1.2	89	14.4	-14.4	-0.3
8	96	3.8	-3.8	0.4	107	3.1	-3.0	0.9	124	3.0	-2.5	1.7	153	2.0	-0.9	1.8	114	4.3	-3.9	1.7	99	7.4	-7.3	1.1	93	12.5	-12.5	0.6
9	153	3.9	-1.8	3.5	164	2.6	-0.7	2.5	147	2.4	-1.3	2.0	143	2.6	-1.6	2.1	111	3.6	-3.4	1.3	93	8.2	-8.2	0.4	91	15.5	-15.5	0.4
10	142	1.6	-1.0	1.3	114	2.4	-2.2	1.0	146	1.4	-0.8	1.2	128	2.3	-1.8	1.4	109	3.4	-3.2	1.1	99	5.1	-5.0	0.8	101	11.4	-11.2	2.2
11	284	2.9	2.8	-0.7	239	0.6	0.5	0.3	262	0.7	0.7	0.1	315	1.0	0.7	-0.7	69	1.9	-1.8	-0.7	77	5.7	-5.5	-1.3	104	13.3	-12.9	3.2
12	317	1.6	1.1	-1.2	263	1.6	1.6	0.2	283	1.3	1.3	-0.3	99	0.6	-0.6	0.1	129	1.3	-1.0	0.8	100	5.0	-4.9	0.9	65	9.1	-8.2	-3.9
13	295	2.1	1.9	-0.9	281	1.0	1.0	-0.2	254	0.7	0.7	0.2	264	1.0	1.0	0.1	93	2.2	-2.2	0.1	81	7.1	-7.0	-1.1	84	12.9	-12.8	-1.4
14	189	1.2	0.2	1.2	297	0.7	0.6	-0.3	343	1.0	0.3	-1.0	253	1.0	1.0	0.3	28	2.4	-1.1	-2.1	74	2.6	-2.5	-0.7	97	10.1	-10.0	1.3
15	225	1.3	0.9	0.9	153	2.0	-0.9	1.8	139	1.8	-1.2	1.4	166	2.1	-0.5	2.0	180	0.9	0.0	0.9	134	3.0	-2.2	2.1	94	5.7	-5.7	0.4
16	132	1.2	-0.9	0.8	180	1.1	0.0	1.1	164	1.5	-0.4	1.4	191	2.5	0.5	2.5	107	1.7	-1.6	0.5	63	7.6	-6.8	-3.5	82	11.0	-10.9	-1.5
17	243	1.8	1.6	0.8	157	4.1	-1.6	3.8	188	4.1	0.6	4.1	189	1.8	0.3	1.8	65	2.1	-1.9	-0.9	60	5.2	-4.5	-2.6	96	13.0	-12.9	1.4
18	221	1.1	0.7	0.8	172	2.8	-0.4	2.8	190	2.9	0.5	2.9	218	4.4	2.7	3.5	247	2.6	2.4	1.0	142	1.1	-0.7	0.9	119	8.6	-7.5	4.2
19	281	1.0	1.0	-0.2	217	1.5	0.9	1.2	245	1.9	1.7	0.8	214	2.2	1.2	1.8	132	1.3	-1.0	0.9	157	4.0	-1.6	3.7	96	7.5	-7.5	0.8
20	323	1.5	0.9	-1.2	108	1.6	-1.5	0.5	333	0.2	0.1	-0.2	225	1.0	0.7	0.7	263	0.8	0.8	0.1	173	2.5	-0.3	2.5	98	7.5	-7.4	1.1
21	306	0.9	0.7	-0.5	81	1.2	-1.2	-0.2	281	0.5	0.5	-0.1	191	1.6	0.3	1.6	223	2.2	1.5	1.6	306	2.4	1.9	-1.4	89	6.2	-6.2	-0.1
22	270	0.4	0.4	0.0	225	0.4	0.3	0.3	249	2.6	2.4	0.9	259	0.5	0.5	0.1	198	1.6	0.5	1.5	114	3.4	-3.1	1.4	84	4.8	-4.8	-0.5
23	302	1.5	1.3	-0.8	76	0.8	-0.8	-0.2	259	1.6	1.6	0.3	233	1.5	1.2	0.9	180	2.3	0.0	2.3	199	5.5	1.8	5.2	106	1.8	-1.7	0.5
24	321	1.3	0.8	-1.0	45	0.1	-0.1	-0.1	221	1.1	0.7	0.8	39	1.4	-0.9	-1.1	336	2.7	1.1	-2.5	90	2.0	-2.0	0.0	94	4.7	-4.7	0.3
25	73	1.0	-1.0	-0.3	198	0.6	0.2	0.6	235	1.2	1.0	0.7	195	2.0	0.5	1.9	271	4.4	4.4	-0.1	342	1.3	0.4	-1.2	54	5.7	-4.6	-3.4
26	347	1.7	0.4	-1.7	318	1.3	0.9	-1.0	289	2.4	2.3	-0.8	292	4.5	4.2	-1.7	284	3.0	2.9	-0.7	185	3.4	0.3	3.4	73	5.4	-5.2	-1.6
27	306	2.9	2.3	-1.7	311	3.5	2.6	-2.3	306	4.7	3.8	-2.8	306	2.9	2.3	-1.7	254	3.3	3.2	0.9	222	5.0	3.3	3.7	105	6.2	-6.0	1.6
28	350	1.7	0.3	-1.7	344	2.9	0.8	-2.8	323	4.1	2.5	-3.3	287	4.5	4.3	-1.3	273	3.9	3.9	-0.2	237	5.6	4.7	3.0	108	0.6	-0.6	0.2
29	349	1.5	0.3	-1.5	346	3.2	0.8	-3.1	330	3.4	1.7	-2.9	265	3.7	3.7	0.3	232	7.4	5.8	4.6	211	7.7	4.0	6.6	90	1.2	-1.2	0.0
30	11	1.5	-0.3	-1.5	330	2.0	1.0	-1.7	277	2.5	2.5	-0.3	257	5.0	4.9	1.1	251	7.9	7.5	2.6	245	8.1	7.4	3.4	117	3.3	-2.9	1.5

Daily Normals of Upper Air Winds (1971-2000)

RANCHI

OCTOBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	32	1.3	-0.7	-1.1	17	2.1	-0.6	-2.0	27	0.4	-0.2	-0.4	243	3.1	2.8	1.4	229	6.1	4.6	4.0	240	14.6	12.6	7.3	129	4.5	-3.5	2.8			
2	13	2.7	-0.6	-2.6	22	1.1	-0.4	-1.0	214	0.4	0.2	0.3	257	3.7	3.6	0.8	236	8.0	6.6	4.5	231	7.7	6.0	4.8	167	3.6	-0.8	3.5			
3	319	1.1	0.7	-0.8	352	1.5	0.2	-1.5	329	1.7	0.9	-1.5	262	4.4	4.4	0.6	263	8.7	8.6	1.1	243	7.6	6.8	3.5	238	4.1	3.5	2.2			
4	45	0.7	-0.5	-0.5	346	2.1	0.5	-2.0	287	1.4	1.3	-0.4	260	6.3	6.2	1.1	265	9.6	9.6	0.9	272	2.8	2.8	-0.1	315	1.0	0.7	-0.7			
5	43	1.8	-1.2	-1.3	319	1.8	1.2	-1.4	272	2.6	2.6	-0.1	257	5.2	5.1	1.2	225	9.8	6.9	6.9	217	8.6	5.2	6.9	206	5.3	2.3	4.8			
6	106	1.8	-1.7	0.5	326	1.4	0.8	-1.2	285	3.5	3.4	-0.9	262	5.6	5.5	0.8	248	10.3	9.5	3.9	224	9.2	6.4	6.6	207	2.7	1.2	2.4			
7	90	2.1	-2.1	0.0	330	2.0	1.0	-1.7	266	2.7	2.7	0.2	264	5.8	5.8	0.6	248	9.3	8.6	3.5	230	10.3	7.9	6.6	223	5.9	4.0	4.3			
8	93	2.2	-2.2	0.1	34	1.8	-1.0	-1.5	335	1.9	0.8	-1.7	275	3.7	3.7	-0.3	246	10.7	9.7	4.4	242	8.3	7.3	3.9	268	2.5	2.5	0.1			
9	259	1.0	1.0	0.2	299	1.3	1.1	-0.6	291	3.3	3.1	-1.2	275	6.7	6.7	-0.6	243	9.8	8.7	4.5	253	14.2	13.6	4.1	248	2.9	2.7	1.1			
10	207	0.4	0.2	0.4	340	3.2	1.1	-3.0	283	6.4	6.2	-1.4	286	5.9	5.7	-1.6	259	8.4	8.2	1.6	229	10.1	7.6	6.6	108	1.6	-1.5	0.5			
11	306	0.9	0.7	-0.5	339	2.2	0.8	-2.1	293	3.6	3.3	-1.4	277	8.0	7.9	-1.0	257	10.6	10.3	2.3	233	8.8	7.0	5.3	171	2.6	-0.4	2.6			
12	76	0.8	-0.8	-0.2	339	1.4	0.5	-1.3	308	2.4	1.9	-1.5	272	4.7	4.7	-0.2	247	10.0	9.2	4.0	257	9.6	9.3	2.2	258	7.9	7.7	1.7			
13	45	0.1	-0.1	-0.1	341	2.1	0.7	-2.0	313	2.5	1.8	-1.7	268	7.6	7.6	0.2	240	11.6	10.0	5.8	245	11.1	10.1	4.7	245	6.1	5.5	2.6			
14	10	1.1	-0.2	-1.1	342	1.9	0.6	-1.8	308	3.6	2.8	-2.2	272	7.4	7.4	-0.2	251	14.4	13.6	4.6	244	18.2	16.4	7.9	271	9.5	9.5	-0.1			
15	79	0.5	-0.5	-0.1	353	2.4	0.3	-2.4	301	3.5	3.0	-1.8	272	6.7	6.7	-0.2	250	16.5	15.5	5.6	229	23.0	17.4	15.0	232	7.0	5.5	4.3			
16	14	0.8	-0.2	-0.8	358	2.3	0.1	-2.3	298	2.1	1.9	-1.0	266	6.1	6.1	0.4	258	12.6	12.3	2.7	258	16.3	15.9	3.4	225	0.1	0.1	0.1			
17	55	1.2	-1.0	-0.7	6	1.9	-0.2	-1.9	279	3.2	3.2	-0.5	261	6.1	6.0	0.9	256	12.5	12.1	3.1	250	15.2	14.3	5.1	280	10.2	10.1	-1.7			
18	339	3.4	1.2	-3.2	335	2.6	1.1	-2.4	274	3.2	3.2	-0.2	275	7.3	7.3	-0.7	255	13.3	12.8	3.5	254	14.7	14.1	4.0	284	8.9	8.7	-2.1			
19	325	1.2	0.7	-1.0	297	3.3	2.9	-1.5	303	4.5	3.8	-2.5	254	5.8	5.6	1.6	258	20.0	19.6	4.2	257	18.5	18.0	4.1	259	12.3	12.1	2.4			
20	360	1.9	0.0	-1.9	340	2.9	1.0	-2.7	287	3.7	3.5	-1.1	280	8.3	8.2	-1.5	258	16.8	16.4	3.5	254	19.0	18.3	5.2	255	9.4	9.1	2.4			
21	340	2.3	0.8	-2.2	318	3.1	2.1	-2.3	272	4.8	4.8	-0.2	261	11.9	11.8	1.8	247	15.3	14.1	5.9	247	21.7	20.0	8.5	283	6.3	6.1	-1.4			
22	353	3.1	0.4	-3.1	313	2.5	1.8	-1.7	297	5.1	4.5	-2.3	275	9.5	9.5	-0.8	263	15.3	15.2	1.8	249	18.0	16.8	6.5	270	32.8	32.8	0.0			
23	331	2.5	1.2	-2.2	341	3.6	1.2	-3.4	308	4.7	3.7	-2.9	273	9.7	9.7	-0.5	247	15.1	13.9	5.8	246	14.2	13.0	5.8	218	5.8	3.6	4.6			
24	343	2.8	0.8	-2.7	327	3.0	1.6	-2.5	311	3.2	2.4	-2.1	276	9.1	9.1	-0.9	266	17.0	17.0	1.2	263	17.7	17.6	2.3	237	7.5	6.3	4.1			
25	331	1.8	0.9	-1.6	336	1.7	0.7	-1.6	282	4.2	4.1	-0.9	271	8.2	8.2	-0.1	260	14.0	13.8	2.4	261	17.8	17.6	2.9	262	14.4	14.2	2.1			
26	3	1.7	-0.1	-1.7	325	2.9	1.7	-2.4	283	5.4	5.3	-1.2	286	11.9	11.4	-3.3	257	19.3	18.8	4.5	249	24.4	22.8	8.6	241	14.5	12.7	6.9			
27	20	2.7	-0.9	-2.5	346	3.4	0.8	-3.3	294	5.6	5.1	-2.3	278	9.9	9.8	-1.3	259	24.1	23.7	4.6	263	27.5	27.3	3.3	263	12.3	12.2	1.6			
28	4	4.0	-0.3	-4.0	345	3.5	0.9	-3.4	312	5.1	3.8	-3.4	274	10.8	10.8	-0.7	260	21.9	21.6	3.9	260	24.2	23.9	4.1	213	13.1	7.2	11.0			
29	355	3.3	0.3	-3.3	341	2.1	0.7	-2.0	284	4.1	4.0	-1.0	270	9.8	9.8	0.0	263	20.2	20.0	2.5	238	21.8	18.5	11.5	254	13.1	12.6	3.6			
30	9	2.0	-0.3	-2.0	353	2.4	0.3	-2.4	302	3.4	2.9	-1.8	281	11.5	11.3	-2.1	264	21.3	21.2	2.2	257	21.8	21.2	5.0	268	9.6	9.6	0.4			
31	41	2.0	-1.3	-1.5	7	2.4	-0.3	-2.4	288	2.9	2.8	-0.9	255	12.0	11.6	3.0	255	19.3	18.6	5.0	261	22.4	22.1	3.6	274	14.9	14.9	-1.1			

Daily Normals of Upper Air Winds (1971-2000)

359

RANCHI

NOVEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	356	1.6	0.1	-1.6	325	1.6	0.9	-1.3	267	3.7	3.7	0.2	274	9.7	9.7	-0.6	260	22.1	21.8	3.9	267	29.3	29.3	1.4	275	7.9	7.9	-0.7			
2	6	1.0	-0.1	-1.0	353	1.6	0.2	-1.6	290	5.4	5.1	-1.9	281	12.7	12.5	-2.4	271	23.2	23.2	-0.5	256	19.5	19.0	4.6	260	7.5	7.4	1.3			
3	29	1.8	-0.9	-1.6	347	1.8	0.4	-1.8	289	4.6	4.3	-1.5	277	10.4	10.3	-1.2	270	24.6	24.6	-0.1	256	25.0	24.3	5.9	280	7.8	7.7	-1.4			
4	3	1.7	-0.1	-1.7	338	2.4	0.9	-2.2	295	4.7	4.2	-2.0	279	13.0	12.8	-2.1	267	27.2	27.2	1.6	258	30.5	29.9	6.2	238	12.2	10.3	6.5			
5	41	1.1	-0.7	-0.8	328	2.2	1.2	-1.9	288	5.1	4.8	-1.6	278	12.1	12.0	-1.7	263	28.0	27.8	3.5	258	27.8	27.2	5.6	283	11.6	11.3	-2.7			
6	32	1.5	-0.8	-1.3	315	2.0	1.4	-1.4	295	6.3	5.7	-2.6	280	12.4	12.2	-2.2	264	24.0	23.9	2.4	264	27.6	27.4	2.9	274	10.6	10.6	-0.7			
7	337	1.3	0.5	-1.2	299	2.1	1.8	-1.0	302	5.5	4.7	-2.9	284	13.4	13.0	-3.3	271	28.0	28.0	-0.5	268	25.8	25.8	0.8	271	13.1	13.1	-0.3			
8	328	2.6	1.4	-2.2	319	3.2	2.1	-2.4	309	5.3	4.1	-3.3	285	12.1	11.7	-3.2	268	19.6	19.6	0.6	270	24.8	24.8	-0.1	297	15.5	13.8	-7.0			
9	325	1.9	1.1	-1.6	320	3.3	2.1	-2.5	302	6.1	5.2	-3.2	282	13.0	12.7	-2.6	270	24.4	24.4	-0.1	268	23.6	23.6	0.8	257	13.7	13.4	3.0			
10	344	3.3	0.9	-3.2	315	3.1	2.2	-2.2	296	6.1	5.5	-2.7	274	14.1	14.1	-1.1	266	23.9	23.8	1.7	261	25.4	25.1	4.0	242	2.6	2.3	1.2			
11	355	3.2	0.3	-3.2	337	3.3	1.3	-3.0	303	6.1	5.1	-3.3	295	13.4	12.1	-5.7	279	25.8	25.5	-4.2	276	30.0	29.9	-2.9	257	9.8	9.5	2.2			
12	337	2.3	0.9	-2.1	347	2.8	0.6	-2.7	302	4.7	4.0	-2.5	292	9.6	8.9	-3.6	277	20.6	20.5	-2.4	272	28.8	28.8	-1.1	281	11.7	11.5	-2.3			
13	15	1.1	-0.3	-1.1	351	3.0	0.5	-3.0	294	5.8	5.3	-2.4	286	12.4	11.9	-3.4	276	24.0	23.8	-2.7	267	34.4	34.3	1.9	303	8.3	7.0	-4.5			
14	355	1.2	0.1	-1.2	347	3.2	0.7	-3.1	305	6.1	5.0	-3.5	292	12.6	11.7	-4.8	272	28.9	28.9	-0.9	272	26.3	26.3	-0.7	252	15.1	14.3	4.7			
15	27	2.0	-0.9	-1.8	338	2.4	0.9	-2.2	293	4.0	3.7	-1.6	289	8.8	8.3	-2.8	269	22.2	22.2	0.2	264	24.4	24.3	2.6	259	11.9	11.7	2.3			
16	354	1.0	0.1	-1.0	322	3.1	1.9	-2.4	299	7.0	6.1	-3.4	285	11.3	10.9	-2.9	270	23.5	23.5	0.2	267	24.5	24.5	1.2	265	11.4	11.4	0.9			
17	21	1.7	-0.6	-1.6	325	2.9	1.7	-2.4	293	6.5	6.0	-2.6	277	10.9	10.8	-1.4	264	21.6	21.5	2.1	253	28.9	27.6	8.5	254	11.5	11.0	3.2			
18	360	0.2	0.0	-0.2	328	2.8	1.5	-2.4	296	7.2	6.5	-3.2	271	12.5	12.5	-0.2	267	25.1	25.1	1.4	251	31.1	29.4	10.0	262	15.5	15.3	2.2			
19	344	1.5	0.4	-1.4	311	3.5	2.6	-2.3	294	8.0	7.3	-3.2	276	14.0	13.9	-1.5	277	23.5	23.3	-2.8	260	29.4	28.9	5.3	242	17.9	15.8	8.5			
20	360	0.8	0.0	-0.8	323	3.5	2.1	-2.8	298	7.6	6.7	-3.6	278	15.0	14.8	-2.2	267	30.1	30.1	1.6	251	32.0	30.2	10.6	—	—	—	—			
21	32	1.3	-0.7	-1.1	335	3.3	1.4	-3.0	303	6.4	5.3	-3.5	280	13.2	13.0	-2.4	253	23.3	22.3	6.7	244	32.6	29.4	14.2	266	10.8	10.8	0.8			
22	336	1.7	0.7	-1.6	333	3.4	1.5	-3.0	289	7.4	7.0	-2.4	269	15.0	15.0	0.2	251	25.4	24.0	8.3	240	40.3	35.0	20.0	234	30.0	24.3	17.6			
23	336	3.9	1.6	-3.6	323	4.0	2.4	-3.2	291	6.9	6.4	-2.5	274	16.0	16.0	-1.2	262	25.1	24.9	3.4	267	31.9	31.9	1.4	264	15.5	15.4	1.7			
24	305	3.3	2.7	-1.9	307	3.6	2.9	-2.2	287	6.4	6.1	-1.9	271	15.9	15.9	-0.2	271	32.7	32.7	-0.8	275	36.7	36.5	-3.5	259	16.0	15.7	3.1			
25	316	3.7	2.6	-2.7	318	4.3	2.9	-3.2	303	8.7	7.3	-4.7	284	19.0	18.5	-4.5	270	28.8	28.8	-0.1	269	27.1	27.1	0.4	270	18.0	18.0	0.0			
26	327	3.8	2.1	-3.2	317	4.2	2.9	-3.1	292	7.2	6.7	-2.7	278	16.7	16.6	-2.2	262	26.9	26.6	3.7	258	27.9	27.3	5.6	243	18.1	16.1	8.3			
27	348	2.4	0.5	-2.3	318	3.8	2.5	-2.8	284	8.9	8.6	-2.1	273	17.4	17.4	-1.0	266	34.5	34.4	2.5	266	29.9	29.8	1.9	277	12.8	12.7	-1.6			
28	347	3.5	0.8	-3.4	327	4.3	2.3	-3.6	292	9.2	8.6	-3.4	271	16.3	16.3	-0.3	260	29.2	28.8	5.1	255	32.3	31.1	8.6	269	31.1	31.1	0.7			
29	355	2.5	0.2	-2.5	338	2.9	1.1	-2.7	297	7.7	6.9	-3.5	263	15.2	15.1	1.9	257	29.8	29.1	6.5	262	31.4	31.1	4.6	238	13.8	11.7	7.4			
30	342	2.6	0.8	-2.5	314	4.6	3.3	-3.2	293	8.9	8.2	-3.5	270	16.0	16.0	0.1	268	25.4	25.4	0.8	259	44.9	44.1	8.6	264	23.2	23.1	2.6			

Daily Normals of Upper Air Winds (1971-2000)

360

RANCHI

DECEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	310	3.9	3.0	-2.5	308	4.7	3.7	-2.9	285	9.9	9.6	-2.6	280	17.4	17.1	-3.1	276	30.6	30.4	-3.2	261	33.2	32.8	5.3	254	20.4	19.6	5.8			
2	330	4.8	2.4	-4.1	309	4.6	3.6	-2.9	289	9.4	8.9	-3.0	281	14.6	14.3	-2.8	268	28.6	28.6	1.0	248	31.3	29.0	11.7	258	12.9	12.6	2.6			
3	350	2.9	0.5	-2.9	318	3.9	2.6	-2.9	296	7.3	6.6	-3.2	281	15.3	15.0	-2.8	273	27.7	27.7	-1.3	256	35.4	34.4	8.5	245	9.0	8.2	3.8			
4	328	3.8	2.0	-3.2	311	5.2	3.9	-3.4	299	10.0	8.8	-4.8	275	14.3	14.2	-1.3	268	29.5	29.5	1.2	258	34.3	33.5	7.2	254	16.4	15.8	4.5			
5	336	3.5	1.4	-3.2	316	4.9	3.4	-3.5	293	7.9	7.3	-3.1	279	13.9	13.7	-2.2	254	26.4	25.4	7.1	248	35.1	32.6	12.9	243	12.0	10.7	5.4			
6	325	3.3	1.9	-2.7	308	4.6	3.6	-2.8	296	8.5	7.6	-3.7	281	13.4	13.2	-2.5	261	26.3	26.0	4.0	247	37.9	34.8	15.1	259	17.8	17.5	3.3			
7	329	3.1	1.6	-2.7	304	3.7	3.1	-2.1	299	7.9	6.9	-3.9	285	14.5	14.0	-3.7	265	22.2	22.1	2.0	252	35.0	33.2	11.1	277	15.0	14.9	-1.8			
8	317	3.8	2.6	-2.8	315	4.1	2.9	-2.9	306	9.5	7.7	-5.5	292	15.2	14.1	-5.7	279	28.5	28.1	-4.7	260	34.6	34.1	6.1	256	14.0	13.6	3.4			
9	332	2.7	1.3	-2.4	310	3.8	2.9	-2.4	291	8.0	7.5	-2.9	274	16.4	16.4	-1.2	267	30.6	30.5	1.8	259	34.7	34.1	6.6	256	27.8	27.0	6.6			
10	318	5.1	3.4	-3.8	309	3.8	3.0	-2.4	286	9.4	9.0	-2.6	281	17.9	17.6	-3.5	270	31.2	31.2	0.2	275	46.1	45.9	-4.0	—	—	—	—			
11	323	4.0	2.4	-3.2	302	4.1	3.5	-2.2	287	9.4	9.0	-2.8	277	16.5	16.4	-2.1	260	33.3	32.8	5.6	260	39.9	39.3	6.8	—	—	—	—			
12	329	2.6	1.3	-2.2	310	4.5	3.4	-2.9	294	9.9	9.0	-4.1	279	19.5	19.3	-3.1	266	30.0	29.9	2.0	255	33.4	32.2	8.7	275	25.0	24.9	-2.0			
13	327	2.7	1.5	-2.3	312	4.2	3.1	-2.8	307	9.6	7.6	-5.8	289	16.3	15.5	-5.2	273	32.5	32.4	-1.9	261	41.3	40.8	6.5	278	14.3	14.2	-2.0			
14	333	3.6	1.6	-3.2	310	4.8	3.7	-3.1	299	9.4	8.2	-4.5	284	14.2	13.8	-3.5	266	21.3	21.2	1.5	260	24.2	23.8	4.1	321	17.6	11.0	-13.7			
15	334	2.5	1.1	-2.3	311	3.8	2.9	-2.5	297	9.4	8.4	-4.2	285	17.0	16.4	-4.3	277	31.6	31.3	-4.0	267	35.8	35.8	1.6	306	17.9	14.4	-10.6			
16	346	2.5	0.6	-2.4	308	3.7	2.9	-2.3	292	9.5	8.8	-3.6	287	16.8	16.1	-4.8	275	33.6	33.5	-2.9	281	38.3	37.6	-7.1	—	—	—	—			
17	335	2.6	1.1	-2.4	300	4.2	3.6	-2.1	295	10.8	9.8	-4.5	276	17.6	17.5	-1.9	268	32.4	32.4	1.4	254	35.4	34.0	9.8	206	31.0	13.6	27.9			
18	339	1.9	0.7	-1.8	302	4.7	4.0	-2.5	298	12.6	11.1	-5.9	283	15.7	15.3	-3.5	276	32.6	32.4	-3.2	266	37.7	37.6	2.3	—	—	—	—			
19	332	2.4	1.1	-2.1	301	4.4	3.8	-2.3	302	8.8	7.5	-4.6	284	16.4	15.9	-3.9	281	31.6	31.0	-6.3	266	43.8	43.7	3.1	265	13.9	13.8	1.3			
20	324	1.7	1.0	-1.4	319	3.7	2.4	-2.8	289	8.0	7.6	-2.6	284	17.7	17.2	-4.3	272	23.1	23.1	-0.8	261	38.1	37.6	6.2	285	20.0	19.3	-5.3			
21	321	2.7	1.7	-2.1	302	3.9	3.3	-2.1	298	10.2	9.0	-4.8	289	18.2	17.2	-5.8	276	28.4	28.2	-3.2	269	34.4	34.4	0.9	340	14.0	4.8	-13.2			
22	337	4.0	1.6	-3.7	315	4.5	3.2	-3.2	306	7.7	6.3	-4.5	291	17.3	16.2	-6.2	271	29.7	29.7	-0.5	260	38.1	37.5	6.5	277	16.0	15.9	-1.9			
23	330	2.4	1.2	-2.1	304	4.1	3.4	-2.3	294	8.7	7.9	-3.6	281	20.3	19.9	-4.0	271	31.4	31.4	-0.4	271	43.2	43.2	-0.4	248	27.1	25.2	10.0			
24	351	3.3	0.5	-3.3	318	4.5	3.0	-3.3	285	9.4	9.1	-2.4	272	21.1	21.1	-0.8	270	36.8	36.8	-0.2	260	43.7	43.0	7.7	266	23.4	23.3	1.7			
25	360	2.4	0.0	-2.4	294	2.7	2.5	-1.1	290	8.4	7.9	-2.9	278	19.0	18.8	-2.6	267	32.6	32.6	1.8	256	34.6	33.6	8.2	293	24.0	22.1	-9.4			
26	358	3.6	0.1	-3.6	304	3.4	2.8	-1.9	292	8.2	7.6	-3.1	281	18.4	18.1	-3.4	274	35.5	35.4	-2.2	283	38.5	37.5	-8.9	289	17.0	16.1	-5.5			
27	317	1.6	1.1	-1.2	307	3.6	2.9	-2.2	287	8.4	8.0	-2.4	272	18.6	18.6	-0.5	261	35.6	35.2	5.6	262	35.9	35.6	4.8	256	20.0	19.4	4.8			
28	300	2.0	1.7	-1.0	291	4.2	3.9	-1.5	281	10.1	9.9	-1.9	280	17.4	17.2	-2.9	260	34.1	33.6	6.0	263	39.2	38.9	4.9	—	—	—	—			
29	327	3.7	2.0	-3.1	306	5.6	4.5	-3.3	295	10.1	9.1	-4.3	279	20.1	19.9	-3.0	271	37.1	37.1	-0.8	270	47.3	47.3	0.0	—	—	—	—			
30	339	2.5	0.9	-2.3	294	6.0	5.5	-2.5	290	11.4	10.7	-3.8	282	18.7	18.3	-4.0	273	29.6	29.6	-1.4	278	29.6	29.3	-3.9	278	24.7	24.5	-3.3			
31	351	1.9	0.3	-1.9	292	4.2	3.9	-1.6	294	9.6	8.8	-3.9	280	22.1	21.7	-4.0	263	34.8	34.6	4.0	264	36.2	36.0	3.5	258	36.0	35.2	7.5			

Daily Normals of Upper Air Winds (1971-2000)

361

SILIGURI

JANUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	241	1.8	1.6	0.9	146	0.4	-0.2	0.3	296	3.9	3.5	-1.7	292	18.5	17.2	-6.8	289	27.8	26.3	-9.1	291	35.3	32.9	-12.7	277	34.4	34.2	-3.9			
2	262	0.7	0.7	0.1	98	0.7	-0.7	0.1	300	3.8	3.3	-1.9	289	16.6	15.7	-5.5	291	30.2	28.1	-11.0	284	42.5	41.2	-10.6	283	25.4	24.7	-5.8			
3	243	0.9	0.8	0.4	214	0.4	0.2	0.3	262	4.2	4.2	0.6	296	18.1	16.3	-7.8	308	35.7	28.0	-22.2	297	42.9	38.1	-19.7	274	35.0	34.9	-2.4			
4	231	1.3	1.0	0.8	—	—	—	—	278	3.0	3.0	-0.4	296	14.0	12.6	-6.1	286	23.7	22.7	-6.7	276	24.2	24.0	-2.7	282	15.4	15.0	-3.3			
5	202	0.5	0.2	0.5	131	0.9	-0.7	0.6	282	1.9	1.9	-0.4	279	18.9	18.6	-3.1	282	29.2	28.5	-6.3	264	51.1	50.8	5.6	282	39.0	38.1	-8.1			
6	225	1.0	0.7	0.7	202	0.5	0.2	0.5	274	4.4	4.4	-0.3	283	17.3	16.9	-3.8	278	36.4	36.1	-4.9	275	35.5	35.4	-3.2	252	8.9	8.5	2.7			
7	225	1.8	1.3	1.3	117	0.9	-0.8	0.4	282	3.5	3.4	-0.7	284	18.8	18.2	-4.6	260	29.0	28.6	4.8	247	33.2	30.6	12.8	298	16.9	14.9	-8.0			
8	288	0.3	0.3	-0.1	124	0.7	-0.6	0.4	295	3.1	2.8	-1.3	283	21.5	21.0	-4.7	261	30.4	30.0	4.6	260	30.8	30.4	5.1	260	25.0	24.6	4.3			
9	247	1.3	1.2	0.5	245	1.7	1.5	0.7	296	5.5	4.9	-2.4	273	20.9	20.9	-1.2	274	38.2	38.1	-2.7	268	27.2	27.2	0.8	286	25.9	24.9	-7.2			
10	248	1.6	1.5	0.6	243	0.7	0.6	0.3	302	4.9	4.2	-2.6	273	16.3	16.3	-0.8	277	26.1	25.9	-3.3	265	46.7	46.5	4.1	269	11.0	11.0	0.2			
11	236	1.1	0.9	0.6	108	0.6	-0.6	0.2	274	6.5	6.5	-0.5	278	21.2	21.0	-2.9	277	35.1	34.8	-4.5	279	33.4	33.0	-5.4	—	—	—	—			
12	250	2.3	2.2	0.8	231	1.3	1.0	0.8	293	5.0	4.6	-2.0	289	23.0	21.8	-7.4	303	33.8	28.5	-18.2	283	39.4	38.4	-9.0	278	27.0	26.7	-3.8			
13	175	1.1	-0.1	1.1	146	0.7	-0.4	0.6	289	7.4	7.0	-2.4	280	17.1	16.8	-3.0	266	35.3	35.2	2.4	256	33.0	32.0	8.0	249	18.0	16.8	6.5			
14	211	0.6	0.3	0.5	288	0.3	0.3	-0.1	291	8.5	8.0	-3.0	281	19.5	19.1	-3.7	274	27.9	27.8	-2.0	267	22.7	22.7	1.3	265	20.0	19.9	1.7			
15	45	0.1	-0.1	-0.1	96	1.0	-1.0	0.1	310	2.3	1.8	-1.5	276	15.4	15.3	-1.7	267	22.6	22.6	1.3	274	38.8	38.7	-2.7	296	9.0	8.1	-3.9			
16	250	1.5	1.4	0.5	229	0.9	0.7	0.6	282	5.4	5.3	-1.1	280	24.8	24.4	-4.3	275	30.1	30.0	-2.5	276	39.4	39.2	-4.1	286	26.0	25.0	-7.2			
17	257	1.7	1.7	0.4	252	0.3	0.3	0.1	289	8.2	7.7	-2.7	286	22.3	21.5	-6.0	257	25.6	25.0	5.6	271	31.5	31.5	-0.3	249	17.1	15.9	6.2			
18	214	1.8	1.0	1.5	218	1.1	0.7	0.9	305	4.9	4.0	-2.8	286	16.7	16.1	-4.6	286	15.7	15.1	-4.2	290	42.3	39.7	-14.5	278	40.3	39.9	-5.7			
19	238	1.3	1.1	0.7	90	0.6	-0.6	0.0	290	5.5	5.2	-1.9	277	13.5	13.4	-1.7	270	25.8	25.8	0.2	280	41.2	40.6	-7.1	280	16.0	15.8	-2.8			
20	90	1.3	-1.3	0.0	306	0.9	0.7	-0.5	269	6.9	6.9	0.1	259	21.6	21.2	4.1	286	29.4	28.2	-8.3	268	49.0	49.0	1.7	244	16.0	14.4	7.0			
21	239	2.1	1.8	1.1	225	0.6	0.4	0.4	297	6.3	5.6	-2.9	289	22.8	21.6	-7.3	273	35.9	35.9	-1.7	266	40.0	39.9	2.8	263	30.0	29.8	3.7			
22	256	1.6	1.6	0.4	297	0.2	0.2	-0.1	300	7.5	6.5	-3.7	289	27.0	25.6	-8.6	273	36.1	36.0	-2.0	265	27.0	26.9	2.4	264	16.0	15.9	1.7			
23	270	1.2	1.2	0.0	270	0.9	0.9	0.0	292	7.4	6.8	-2.8	282	20.5	20.1	-4.2	271	29.6	29.6	-0.6	266	25.0	24.9	1.7	252	20.0	19.0	6.2			
24	247	1.3	1.2	0.5	273	1.7	1.7	-0.1	294	8.2	7.5	-3.3	291	23.4	21.9	-8.2	268	28.1	28.1	1.0	240	33.7	29.1	16.9	261	12.1	11.9	1.9			
25	231	1.9	1.5	1.2	240	0.8	0.7	0.4	297	4.4	3.9	-2.0	287	24.0	22.9	-7.1	263	24.6	24.4	3.1	253	18.0	17.2	5.3	233	3.0	2.4	1.8			
26	231	1.9	1.5	1.2	150	0.8	-0.4	0.7	305	4.7	3.8	-2.7	285	21.3	20.6	-5.4	267	38.5	38.5	1.9	275	38.3	38.1	-3.4	257	20.0	19.5	4.5			
27	232	1.8	1.4	1.1	166	0.4	-0.1	0.4	288	7.8	7.4	-2.4	282	17.6	17.2	-3.5	275	33.7	33.6	-2.9	273	33.8	33.8	-1.8	235	21.0	17.2	12.0			
28	225	2.7	1.9	1.9	232	1.6	1.3	1.0	301	5.6	4.8	-2.9	273	21.5	21.5	-1.3	276	41.9	41.7	-4.2	244	26.7	24.1	11.6	—	—	—	—			
29	207	1.8	0.8	1.6	241	1.0	0.9	0.5	283	7.4	7.2	-1.7	285	21.7	21.0	-5.6	291	29.6	27.7	-10.5	276	32.0	31.8	-3.3	283	11.6	11.3	-2.6			
30	261	3.2	3.2	0.5	254	1.8	1.7	0.5	284	6.0	5.8	-1.4	294	19.5	17.9	-7.8	287	35.4	33.8	-10.4	305	35.6	29.2	-20.4	295	15.0	13.6	-6.3			
31	184	1.4	0.1	1.4	263	1.6	1.6	0.2	299	6.2	5.4	-3.0	284	23.3	22.6	-5.8	288	35.8	34.0	-11.3	270	30.8	30.8	-0.2	262	22.0	21.8	3.1			

Daily Normals of Upper Air Winds (1971-2000)

SILIGURI

FEBRUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	180	0.7	0.0	0.7	209	1.0	0.5	0.9	282	3.8	3.7	-0.8	277	21.8	21.6	-2.7	269	34.5	34.5	0.7	268	33.9	33.9	1.1	263	18.0	17.9	2.2
2	241	1.3	1.1	0.6	203	0.8	0.3	0.7	272	7.8	7.8	-0.3	279	22.1	21.8	-3.5	260	37.7	37.2	6.4	248	51.8	48.1	19.1	—	—	—	—
3	244	2.5	2.3	1.1	229	0.9	0.7	0.6	273	7.1	7.1	-0.4	287	18.9	18.1	-5.4	279	38.0	37.5	-5.9	255	63.4	61.2	16.5	—	—	—	—
4	257	4.1	4.0	0.9	283	1.3	1.3	-0.3	287	6.3	6.0	-1.8	285	20.6	19.9	-5.3	279	53.2	52.5	-8.5	255	88.0	85.0	22.8	—	—	—	—
5	216	1.4	0.8	1.1	270	0.9	0.9	0.0	279	8.0	7.9	-1.3	285	19.7	19.1	-5.0	284	34.4	33.4	-8.2	278	45.4	45.0	-6.2	—	—	—	—
6	232	1.8	1.4	1.1	242	4.0	3.5	1.9	291	6.2	5.8	-2.2	289	19.4	18.3	-6.4	280	34.4	33.9	-6.1	264	26.4	26.3	2.6	262	63.0	62.4	8.8
7	191	1.6	0.3	1.6	250	1.2	1.1	0.4	281	6.7	6.6	-1.3	282	11.9	11.6	-2.5	275	34.3	34.2	-2.7	269	44.5	44.5	0.8	265	24.0	23.9	1.9
8	169	1.0	-0.2	1.0	228	1.5	1.1	1.0	276	7.0	7.0	-0.7	284	17.1	16.6	-4.1	271	38.3	38.3	-0.9	254	30.2	29.0	8.3	273	24.4	24.4	-1.3
9	243	1.3	1.2	0.6	256	0.8	0.8	0.2	287	7.3	7.0	-2.1	280	16.0	15.8	-2.7	288	41.8	39.7	-13.2	274	37.2	37.1	-2.3	—	—	—	—
10	270	0.7	0.7	0.0	279	0.6	0.6	-0.1	273	7.0	7.0	-0.4	275	19.0	18.9	-1.7	278	36.6	36.3	-4.9	271	40.7	40.7	-0.6	261	11.0	10.9	1.7
11	270	0.5	0.5	0.0	315	0.6	0.4	-0.4	278	6.7	6.6	-0.9	286	18.7	18.0	-5.0	274	25.4	25.3	-1.9	270	34.0	34.0	-0.1	290	40.9	38.4	-14.2
12	242	2.1	1.9	1.0	252	2.9	2.8	0.9	283	6.9	6.7	-1.6	288	19.0	18.0	-6.0	287	30.5	29.2	-8.9	258	33.9	33.2	6.9	265	28.0	27.9	2.4
13	212	1.9	1.0	1.6	262	2.8	2.8	0.4	279	9.2	9.1	-1.4	286	21.4	20.6	-5.9	284	33.3	32.4	-7.9	287	46.7	44.6	-13.7	260	54.0	53.2	9.4
14	248	2.9	2.7	1.1	264	4.0	4.0	0.4	280	11.1	10.9	-2.0	274	21.7	21.6	-1.5	265	37.1	37.0	3.3	255	42.5	41.1	10.7	—	—	—	—
15	225	2.5	1.8	1.8	256	4.9	4.8	1.2	273	12.4	12.4	-0.7	272	19.9	19.9	-0.8	262	38.3	38.0	5.1	240	31.0	26.8	15.5	—	—	—	—
16	254	3.5	3.4	1.0	265	5.6	5.6	0.5	286	10.1	9.7	-2.7	278	24.4	24.2	-3.4	274	42.7	42.6	-2.7	273	46.1	46.0	-2.6	309	13.0	10.1	-8.2
17	234	1.4	1.1	0.8	266	1.4	1.4	0.1	276	10.8	10.7	-1.2	275	21.8	21.7	-1.9	267	39.5	39.4	2.2	270	48.5	48.5	0.3	280	20.3	20.0	-3.4
18	232	3.3	2.6	2.0	264	1.8	1.8	0.2	277	9.6	9.5	-1.2	282	18.6	18.2	-4.0	260	34.7	34.2	6.0	269	62.5	62.5	1.3	—	—	—	—
19	245	2.3	2.1	1.0	247	4.3	4.0	1.7	273	8.5	8.5	-0.4	277	23.5	23.3	-3.0	274	52.4	52.3	-3.4	272	43.6	43.6	-1.6	273	80.0	79.9	-4.2
20	251	4.0	3.8	1.3	263	2.5	2.5	0.3	264	5.9	5.9	0.6	282	18.7	18.3	-3.8	259	22.9	22.5	4.5	263	42.0	41.7	4.9	—	—	—	—
21	243	2.2	2.0	1.0	238	3.1	2.6	1.6	268	10.1	10.1	0.3	273	19.7	19.7	-0.9	265	32.6	32.5	3.1	261	37.1	36.7	5.5	270	18.0	18.0	0.0
22	247	4.4	4.1	1.7	256	3.3	3.2	0.8	275	9.5	9.5	-0.8	289	18.5	17.5	-6.1	267	31.3	31.3	1.4	259	32.0	31.4	6.1	—	—	—	—
23	235	1.9	1.6	1.1	244	3.7	3.3	1.6	269	4.2	4.2	0.1	278	21.3	21.1	-3.1	280	23.8	23.4	-4.3	282	22.8	22.3	-4.8	280	18.0	17.7	-3.1
24	229	2.0	1.5	1.3	212	1.9	1.0	1.6	276	8.1	8.1	-0.8	278	21.2	21.0	-3.1	297	30.9	27.4	-14.2	340	46.0	15.7	-43.2	260	6.0	5.9	1.0
25	209	2.3	1.1	2.0	247	2.3	2.1	0.9	285	8.5	8.2	-2.2	295	21.9	19.8	-9.4	289	25.9	24.4	-8.6	288	34.5	32.8	-10.6	168	15.0	-3.1	14.7
26	240	2.4	2.1	1.2	260	4.1	4.0	0.7	286	7.3	7.0	-2.0	286	18.9	18.1	-5.3	292	33.9	31.3	-12.9	267	38.8	38.7	2.3	282	36.0	35.2	-7.5
27	189	1.3	0.2	1.3	250	1.5	1.4	0.5	282	7.0	6.8	-1.5	284	21.2	20.6	-5.2	291	44.2	41.4	-15.5	298	53.0	46.6	-25.3	317	75.0	51.1	-54.9
28	222	2.5	1.7	1.9	241	3.3	2.9	1.6	286	9.7	9.3	-2.7	288	19.7	18.7	-6.1	287	36.5	35.0	-10.4	282	38.0	37.1	-8.0	302	18.9	16.0	-10.0
29	139	4.0	-2.6	3.0	249	4.0	3.7	1.4	294	9.3	8.5	-3.7	287	13.3	12.7	-3.9	303	45.0	37.7	-24.5	308	95.0	74.9	-58.5	—	—	—	—

Daily Normals of Upper Air Winds (1971-2000)

363

SILIGURI

MARCH

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	240	2.4	2.1	1.2	259	3.6	3.5	0.7	285	6.3	6.1	-1.6	278	20.3	20.1	-2.9	281	31.7	31.1	-6.3	273	33.6	33.5	-1.9	282	21.3	20.8	-4.5			
2	152	1.5	-0.7	1.3	286	2.5	2.4	-0.7	290	4.5	4.2	-1.5	288	18.3	17.4	-5.8	280	37.6	37.0	-6.6	284	49.6	48.1	-12.3	280	37.0	36.4	-6.4			
3	241	3.1	2.7	1.5	252	2.5	2.4	0.8	287	5.1	4.9	-1.5	281	17.0	16.7	-3.3	285	30.6	29.5	-8.1	271	44.8	44.8	-0.6	182	5.0	0.2	5.0			
4	228	1.3	1.0	0.9	238	1.3	1.1	0.7	287	7.4	7.1	-2.2	289	22.6	21.3	-7.5	284	18.0	17.5	-4.4	279	34.2	33.8	-5.5	263	10.8	10.7	1.3			
5	235	1.6	1.3	0.9	248	2.4	2.2	0.9	279	11.4	11.3	-1.7	287	24.0	23.0	-7.0	282	35.9	35.1	-7.5	277	37.3	37.0	-4.4	266	22.3	22.2	1.6			
6	234	2.9	2.3	1.7	264	4.9	4.9	0.5	293	10.8	10.0	-4.2	288	22.1	21.0	-6.8	286	31.3	30.1	-8.7	283	29.5	28.7	-6.8	296	18.4	16.5	-8.2			
7	240	3.6	3.1	1.8	246	2.2	2.0	0.9	280	9.5	9.4	-1.6	282	16.3	16.0	-3.3	281	25.3	24.8	-4.9	259	23.0	22.6	4.4	276	13.9	13.8	-1.4			
8	241	1.3	1.1	0.6	248	3.2	3.0	1.2	279	9.8	9.7	-1.5	278	17.7	17.5	-2.6	276	25.2	25.1	-2.5	278	36.8	36.4	-5.2	269	31.0	31.0	0.5			
9	207	1.3	0.6	1.2	240	3.2	2.8	1.6	272	9.5	9.5	-0.4	283	19.4	18.9	-4.2	286	34.6	33.2	-9.6	271	36.6	36.6	-0.4	272	21.1	21.1	-0.8			
10	232	2.8	2.2	1.7	231	2.6	2.0	1.6	281	8.7	8.6	-1.6	289	24.3	23.0	-7.7	283	28.4	27.7	-6.3	—	—	—	—	—	—	—	—	—	—	
11	194	0.4	0.1	0.4	238	2.5	2.1	1.3	285	8.4	8.1	-2.2	281	18.8	18.5	-3.6	280	29.2	28.8	-5.0	270	28.6	28.6	-0.2	272	27.3	27.3	-1.1			
12	220	2.3	1.5	1.8	257	2.7	2.6	0.6	281	10.2	10.0	-2.0	283	21.6	21.0	-5.0	271	22.9	22.9	-0.5	281	37.9	37.2	-7.5	281	22.7	22.2	-4.5			
13	252	2.6	2.5	0.8	266	4.5	4.5	0.3	281	10.4	10.2	-2.0	276	19.6	19.5	-1.9	275	34.8	34.7	-2.9	273	29.9	29.9	-1.5	263	23.8	23.6	3.0			
14	235	3.2	2.6	1.8	254	4.0	3.8	1.1	279	8.8	8.7	-1.4	285	15.5	15.0	-3.9	286	32.3	31.1	-8.8	274	24.7	24.6	-1.9	288	24.7	23.5	-7.5			
15	247	2.3	2.1	0.9	247	3.4	3.1	1.3	284	8.9	8.7	-2.1	287	24.7	23.7	-7.1	282	41.4	40.4	-8.9	263	30.9	30.7	3.9	286	24.0	23.1	-6.6			
16	255	1.6	1.5	0.4	255	3.5	3.4	0.9	284	9.7	9.4	-2.3	290	19.7	18.6	-6.6	284	31.1	30.1	-7.7	277	23.2	23.0	-2.7	285	13.3	12.9	-3.4			
17	243	1.6	1.4	0.7	235	1.6	1.3	0.9	284	9.3	9.0	-2.3	284	14.9	14.5	-3.6	272	29.3	29.3	-0.9	263	41.8	41.5	4.8	271	31.0	31.0	-0.7			
18	194	1.2	0.3	1.2	243	2.0	1.8	0.9	281	9.2	9.0	-1.8	274	18.9	18.8	-1.4	276	40.1	39.9	-4.1	273	28.2	28.2	-1.3	285	18.1	17.5	-4.7			
19	261	2.5	2.5	0.4	268	5.0	5.0	0.2	286	7.7	7.4	-2.1	294	17.1	15.6	-7.0	274	19.1	19.1	-1.2	267	21.1	21.1	1.1	239	10.1	8.7	5.2			
20	247	2.1	1.9	0.8	256	4.4	4.3	1.1	278	8.8	8.7	-1.3	283	22.1	21.5	-4.9	281	26.2	25.7	-5.2	270	36.7	36.7	0.2	258	19.3	18.9	4.0			
21	239	3.3	2.8	1.7	258	4.7	4.6	1.0	281	10.1	9.9	-2.0	282	20.4	20.0	-4.2	268	28.7	28.7	1.0	265	33.2	33.1	3.0	262	20.0	19.8	2.8			
22	241	2.9	2.5	1.4	250	4.7	4.4	1.6	275	10.6	10.6	-0.9	280	19.9	19.6	-3.6	268	35.5	35.5	1.2	269	31.1	31.1	0.7	251	25.8	24.4	8.5			
23	260	4.2	4.1	0.7	250	6.3	5.9	2.1	276	8.0	8.0	-0.8	281	19.7	19.4	-3.7	284	33.4	32.4	-8.0	259	36.2	35.6	6.7	274	27.0	26.9	-1.8			
24	223	1.8	1.2	1.3	258	3.5	3.4	0.7	274	9.4	9.4	-0.6	278	19.4	19.2	-2.6	275	30.1	30.0	-2.8	259	40.6	39.8	7.8	264	24.6	24.5	2.4			
25	90	0.6	-0.6	0.0	252	2.5	2.4	0.8	278	8.5	8.4	-1.2	286	19.9	19.1	-5.6	270	23.3	23.3	-0.2	259	36.1	35.4	7.1	266	23.3	23.2	1.7			
26	186	1.8	0.2	1.8	262	4.4	4.4	0.6	267	11.0	11.0	0.6	279	16.1	15.9	-2.4	272	28.2	28.2	-1.2	257	34.8	34.0	7.6	276	33.9	33.7	-3.6			
27	194	0.4	0.1	0.4	277	1.7	1.7	-0.2	281	5.2	5.1	-1.0	277	10.5	10.4	-1.2	285	16.5	16.0	-4.2	276	31.7	31.5	-3.5	280	19.7	19.4	-3.3			
28	96	0.9	-0.9	0.1	270	1.5	1.5	0.0	294	3.4	3.1	-1.4	286	13.9	13.3	-3.9	290	32.7	30.7	-11.4	283	35.0	34.0	-8.1	293	14.3	13.2	-5.6			
29	173	0.8	-0.1	0.8	269	5.1	5.1	0.1	272	6.5	6.5	-0.2	287	16.0	15.3	-4.7	288	28.8	27.4	-8.9	279	32.0	31.6	-4.8	269	14.6	14.6	0.2			
30	202	0.5	0.2	0.5	253	3.1	3.0	0.9	274	8.9	8.9	-0.6	287	18.3	17.5	-5.4	302	18.7	15.9	-9.9	272	28.7	28.7	-0.8	269	17.5	17.5	0.4			
31	253	3.8	3.6	1.1	265	3.3	3.3	0.3	282	5.6	5.5	-1.2	300	15.1	13.1	-7.5	274	30.1	30.0	-1.9	292	36.3	33.6	-13.8	262	44.5	44.1	6.1			

Daily Normals of Upper Air Winds (1971-2000)

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SILIGURI

APRIL

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	264	1.9	1.9	0.2	253	5.8	5.5	1.7	277	9.7	9.6	-1.1	277	19.2	19.1	-2.2	264	26.7	26.5	2.9	252	36.8	35.1	11.1	275	26.3	26.2	-2.5			
2	117	0.7	-0.6	0.3	263	3.3	3.3	0.4	284	7.3	7.1	-1.8	289	15.5	14.7	-5.0	266	23.8	23.8	1.5	280	31.8	31.4	-5.3	252	39.0	37.1	12.1			
3	212	1.5	0.8	1.3	243	2.7	2.4	1.2	273	8.9	8.9	-0.5	281	14.5	14.2	-2.8	270	25.4	25.4	0.1	276	48.1	47.9	-4.8	271	26.3	26.3	-0.6			
4	233	1.0	0.8	0.6	250	3.3	3.1	1.1	272	7.4	7.4	-0.3	280	12.1	11.9	-2.2	256	24.7	24.0	5.8	274	30.9	30.8	-1.9	295	15.3	13.9	-6.5			
5	176	1.4	-0.1	1.4	235	3.8	3.1	2.2	273	8.5	8.5	-0.4	276	16.0	15.9	-1.8	268	28.8	28.8	1.1	265	34.9	34.8	2.8	249	10.2	9.5	3.6			
6	236	2.5	2.1	1.4	246	5.4	4.9	2.2	281	8.5	8.3	-1.6	286	17.5	16.8	-4.9	271	25.3	25.3	-0.6	265	40.1	40.0	3.3	278	28.3	28.0	-4.0			
7	117	1.1	-1.0	0.5	227	1.6	1.2	1.1	283	7.5	7.3	-1.7	293	15.9	14.7	-6.1	310	23.5	18.1	-15.0	281	21.7	21.3	-4.2	272	14.0	14.0	-0.4			
8	111	2.5	-2.3	0.9	265	7.3	7.3	0.6	272	7.6	7.6	-0.2	281	14.6	14.3	-2.7	275	17.0	16.9	-1.5	270	19.1	19.1	-0.1	274	22.7	22.7	-1.4			
9	208	1.5	0.7	1.3	270	3.2	3.2	0.0	276	8.3	8.3	-0.9	283	17.4	17.0	-3.9	276	22.7	22.6	-2.3	268	28.8	28.8	0.8	276	19.4	19.3	-1.9			
10	110	1.2	-1.1	0.4	248	2.2	2.0	0.8	283	9.7	9.4	-2.2	276	10.3	10.2	-1.1	282	15.5	15.1	-3.3	264	32.9	32.7	3.5	279	6.4	6.3	-1.0			
11	139	0.9	-0.6	0.7	245	3.8	3.5	1.6	279	7.4	7.3	-1.1	282	17.6	17.2	-3.8	294	23.8	21.8	-9.6	279	31.0	30.7	-4.6	300	9.9	8.6	-5.0			
12	239	4.9	4.2	2.5	246	4.6	4.2	1.9	272	6.8	6.8	-0.2	284	16.7	16.2	-4.1	267	19.5	19.5	1.0	280	22.3	22.0	-3.7	298	7.8	6.9	-3.6			
13	251	3.9	3.7	1.3	255	5.8	5.6	1.5	275	10.4	10.4	-0.9	282	15.9	15.6	-3.3	285	21.1	20.4	-5.3	274	28.5	28.4	-1.9	299	12.2	10.7	-5.9			
14	252	2.5	2.4	0.8	257	4.7	4.6	1.1	277	9.0	8.9	-1.1	281	16.1	15.8	-3.2	281	24.0	23.6	-4.6	269	28.9	28.9	0.3	279	18.4	18.2	-2.9			
15	263	1.7	1.7	0.2	270	2.9	2.9	0.0	273	10.3	10.3	-0.5	282	16.3	15.9	-3.4	273	23.4	23.4	-1.1	270	28.8	28.8	-0.1	259	17.0	16.7	3.3			
16	243	4.6	4.1	2.1	250	4.4	4.1	1.5	290	8.8	8.3	-3.0	287	13.0	12.4	-3.9	280	24.1	23.7	-4.2	282	20.8	20.4	-4.2	210	2.0	1.0	1.7			
17	246	3.4	3.1	1.4	252	3.5	3.3	1.1	265	10.7	10.7	0.9	279	14.6	14.4	-2.3	288	22.5	21.4	-6.8	269	21.2	21.2	0.4	251	7.2	6.8	2.3			
18	221	1.8	1.2	1.4	231	2.2	1.7	1.4	272	7.2	7.2	-0.2	279	15.7	15.5	-2.5	289	26.6	25.1	-8.8	271	31.3	31.3	-0.8	270	15.7	15.7	0.0			
19	101	3.3	-3.2	0.6	216	1.4	0.8	1.1	277	6.8	6.8	-0.8	286	15.1	14.5	-4.1	272	17.7	17.7	-0.7	267	25.4	25.4	1.2	265	16.5	16.4	1.4			
20	131	3.3	-2.5	2.2	99	0.6	-0.6	0.1	284	6.2	6.0	-1.5	282	14.7	14.4	-3.0	303	22.1	18.6	-11.9	279	23.8	23.5	-3.7	285	12.4	12.0	-3.3			
21	139	2.3	-1.5	1.7	241	1.8	1.6	0.9	282	7.8	7.6	-1.6	279	13.9	13.7	-2.1	285	17.8	17.2	-4.6	268	19.0	19.0	0.8	275	11.2	11.2	-0.9			
22	121	0.6	-0.5	0.3	207	0.9	0.4	0.8	276	9.6	9.5	-1.0	276	15.6	15.5	-1.7	279	12.0	11.8	-1.9	256	22.2	21.6	5.2	265	18.2	18.1	1.7			
23	95	2.4	-2.4	0.2	243	0.4	0.4	0.2	273	10.6	10.6	-0.6	277	11.6	11.5	-1.5	270	21.0	21.0	0.1	287	26.2	25.1	-7.6	281	9.7	9.5	-1.9			
24	137	1.9	-1.3	1.4	246	3.6	3.3	1.5	279	10.9	10.8	-1.8	283	17.5	17.1	-3.9	288	13.7	13.0	-4.3	278	20.5	20.3	-2.7	285	10.7	10.3	-2.8			
25	84	2.0	-2.0	-0.2	180	0.7	0.0	0.7	274	9.8	9.8	-0.6	282	13.0	12.7	-2.7	273	17.5	17.5	-0.9	270	18.2	18.2	-0.1	250	16.0	15.0	5.5			
26	80	2.7	-2.7	-0.5	119	1.0	-0.9	0.5	268	6.7	6.7	0.2	283	13.0	12.7	-2.9	284	17.3	16.8	-4.3	256	18.8	18.3	4.4	244	3.0	2.7	1.3			
27	127	2.0	-1.6	1.2	104	0.4	-0.4	0.1	277	7.8	7.7	-0.9	286	12.1	11.6	-3.4	292	13.0	12.1	-4.8	272	20.0	20.0	-0.6	275	8.4	8.4	-0.7			
28	100	2.9	-2.9	0.5	53	0.5	-0.4	-0.3	279	6.2	6.1	-1.0	286	12.1	11.6	-3.4	281	15.6	15.3	-3.1	270	20.3	20.3	0.1	288	10.0	9.5	-3.0			
29	143	1.5	-0.9	1.2	239	0.6	0.5	0.3	281	6.9	6.8	-1.3	288	7.9	7.5	-2.5	292	13.5	12.5	-5.0	274	23.3	23.2	-1.6	267	12.7	12.7	0.7			
30	79	1.5	-1.5	-0.3	50	0.8	-0.6	-0.5	285	6.2	6.0	-1.6	296	14.6	13.1	-6.5	296	12.4	11.1	-5.5	279	22.6	22.3	-3.4	304	11.2	9.3	-6.2			

Daily Normals of Upper Air Winds (1971-2000)

365

SILIGURI

MAY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	45	1.1	-0.8	-0.8	291	0.9	0.8	-0.3	273	7.0	7.0	-0.4	285	13.8	13.3	-3.6	266	14.3	14.3	1.1	277	16.4	16.3	-1.9	297	12.8	11.4	-5.9			
2	74	1.9	-1.8	-0.5	294	1.0	0.9	-0.4	285	7.7	7.4	-2.0	290	10.3	9.7	-3.5	277	10.2	10.1	-1.2	262	20.4	20.2	2.7	244	8.1	7.3	3.5			
3	90	1.3	-1.3	0.0	127	0.5	-0.4	0.3	286	5.1	4.9	-1.4	279	9.3	9.2	-1.5	272	13.5	13.5	-0.5	252	17.7	16.9	5.4	293	20.0	18.4	-7.8			
4	96	1.8	-1.8	0.2	197	1.7	0.5	1.6	267	7.7	7.7	0.4	276	11.6	11.5	-1.2	262	16.5	16.3	2.3	274	19.0	19.0	-1.2	322	9.2	5.7	-7.2			
5	129	2.1	-1.6	1.3	257	1.3	1.3	0.3	265	4.9	4.9	0.4	281	10.2	10.0	-1.9	293	13.6	12.5	-5.3	262	13.5	13.4	1.8	258	19.4	19.0	4.1			
6	86	2.9	-2.9	-0.2	129	0.6	-0.5	0.4	267	6.8	6.8	0.4	296	7.2	6.5	-3.2	269	21.8	21.8	0.3	263	17.8	17.7	2.2	290	7.1	6.7	-2.4			
7	105	4.1	-4.0	1.1	164	1.5	-0.4	1.4	279	6.2	6.1	-1.0	290	13.5	12.7	-4.7	295	16.3	14.8	-6.8	291	22.0	20.5	-7.9	276	16.5	16.4	-1.6			
8	115	1.4	-1.3	0.6	184	1.3	0.1	1.3	284	7.0	6.8	-1.7	289	14.0	13.3	-4.5	283	19.2	18.7	-4.2	278	28.1	27.8	-3.8	194	4.9	1.2	4.8			
9	137	2.1	-1.4	1.5	191	1.0	0.2	1.0	278	6.9	6.8	-0.9	279	10.7	10.6	-1.6	261	19.4	19.2	2.9	268	21.9	21.9	0.9	125	2.8	-2.3	1.6			
10	261	1.2	1.2	0.2	219	1.4	0.9	1.1	274	6.2	6.2	-0.4	280	11.2	11.0	-2.0	272	22.7	22.7	-0.8	266	26.5	26.4	2.0	277	8.2	8.1	-1.0			
11	77	0.9	-0.9	-0.2	218	1.8	1.1	1.4	272	6.7	6.7	-0.2	268	10.0	10.0	0.4	276	15.5	15.4	-1.6	256	15.3	14.8	3.7	275	13.4	13.4	-1.1			
12	138	1.2	-0.8	0.9	232	1.6	1.3	1.0	279	6.6	6.5	-1.0	287	12.1	11.6	-3.6	283	17.9	17.4	-4.1	273	17.4	17.4	-1.0	246	13.0	11.9	5.3			
13	137	1.6	-1.1	1.2	153	0.4	-0.2	0.4	274	6.6	6.6	-0.5	271	10.9	10.9	-0.1	276	19.9	19.8	-2.0	277	28.2	28.0	-3.4	276	13.6	13.5	-1.4			
14	106	2.5	-2.4	0.7	70	1.5	-1.4	-0.5	279	6.1	6.0	-1.0	277	10.2	10.1	-1.2	271	22.9	22.9	-0.2	278	21.0	20.8	-2.8	261	4.3	4.2	0.7			
15	98	2.2	-2.2	0.3	160	1.2	-0.4	1.1	275	4.9	4.9	-0.4	282	9.3	9.1	-2.0	258	18.6	18.2	3.9	263	18.0	17.9	2.1	277	4.2	4.2	-0.5			
16	144	1.7	-1.0	1.4	45	0.6	-0.4	-0.4	281	5.7	5.6	-1.1	282	9.1	8.9	-1.9	281	13.3	13.0	-2.6	266	13.2	13.2	1.0	327	7.8	4.3	-6.5			
17	112	1.1	-1.0	0.4	222	1.3	0.9	1.0	272	4.6	4.6	-0.2	277	6.3	6.2	-0.8	266	13.8	13.8	1.0	262	19.2	19.0	2.6	300	5.3	4.6	-2.7			
18	117	1.3	-1.2	0.6	214	0.4	0.2	0.3	276	3.9	3.9	-0.4	276	8.3	8.3	-0.9	264	14.1	14.0	1.5	254	21.9	21.0	6.2	294	9.0	8.2	-3.6			
19	113	2.6	-2.4	1.0	141	1.4	-0.9	1.1	238	3.6	3.1	1.9	288	8.1	7.7	-2.5	272	12.9	12.9	-0.5	254	19.8	19.1	5.3	312	12.0	8.9	-8.0			
20	123	2.4	-2.0	1.3	122	1.3	-1.1	0.7	272	6.6	6.6	-0.2	286	7.8	7.5	-2.2	281	16.3	16.0	-3.2	287	9.0	8.6	-2.6	301	7.2	6.2	-3.7			
21	82	1.4	-1.4	-0.2	113	0.8	-0.7	0.3	272	3.4	3.4	-0.1	273	8.1	8.1	-0.4	258	18.4	18.0	3.8	251	28.2	26.6	9.4	254	8.0	7.7	2.2			
22	118	2.1	-1.9	1.0	185	1.1	0.1	1.1	276	5.7	5.7	-0.6	281	8.7	8.6	-1.6	261	14.1	13.9	2.1	292	11.2	10.4	-4.1	275	8.0	8.0	-0.7			
23	118	1.7	-1.5	0.8	111	1.7	-1.6	0.6	257	2.6	2.5	0.6	287	9.1	8.7	-2.6	264	16.9	16.8	1.8	266	17.8	17.8	1.3	250	17.2	16.2	5.8			
24	95	2.5	-2.5	0.2	135	1.1	-0.8	0.8	272	3.6	3.6	-0.1	274	8.3	8.3	-0.6	273	13.9	13.9	-0.7	251	18.1	17.1	5.9	225	4.4	3.1	3.1			
25	93	2.0	-2.0	0.1	207	2.0	0.9	1.8	268	7.3	7.3	0.3	283	7.6	7.4	-1.7	253	12.3	11.8	3.5	243	9.0	8.0	4.1	204	5.1	2.1	4.7			
26	111	3.4	-3.2	1.2	115	2.1	-1.9	0.9	278	6.0	5.9	-0.8	284	9.9	9.6	-2.4	306	13.2	10.7	-7.7	260	17.6	17.3	3.0	281	8.6	8.4	-1.7			
27	96	2.0	-2.0	0.2	112	0.5	-0.5	0.2	272	5.3	5.3	-0.2	280	8.7	8.6	-1.5	298	13.2	11.7	-6.1	279	14.4	14.2	-2.2	229	9.1	6.9	5.9			
28	104	2.9	-2.8	0.7	129	2.2	-1.7	1.4	283	4.4	4.3	-1.0	283	7.9	7.7	-1.8	298	12.7	11.2	-5.9	258	17.6	17.2	3.6	269	16.0	16.0	0.2			
29	93	2.2	-2.2	0.1	95	2.3	-2.3	0.2	275	5.8	5.8	-0.5	286	7.6	7.3	-2.1	262	11.5	11.4	1.7	248	28.2	26.1	10.6	259	7.3	7.2	1.4			
30	99	2.6	-2.6	0.4	111	1.9	-1.8	0.7	279	5.7	5.6	-0.9	287	11.3	10.8	-3.4	260	12.9	12.7	2.3	242	16.4	14.4	7.8	235	9.8	8.1	5.6			
31	95	1.1	-1.1	0.1	180	0.4	0.0	0.4	280	6.6	6.5	-1.1	285	9.6	9.3	-2.5	271	17.2	17.2	-0.4	257	19.3	18.8	4.2	248	12.5	11.6	4.6			

Daily Normals of Upper Air Winds (1971-2000)

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SILIGURI

JUNE

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	95	1.2	-1.2	0.1	235	1.9	1.6	1.1	281	6.3	6.2	-1.2	280	10.7	10.5	-1.9	261	14.0	13.8	2.2	254	19.7	18.9	5.5	251	12.1	11.4	4.0			
2	102	1.4	-1.4	0.3	240	1.6	1.4	0.8	276	7.3	7.3	-0.8	280	10.0	9.8	-1.8	273	12.1	12.1	-0.7	263	19.7	19.5	2.5	244	12.1	10.9	5.3			
3	108	1.9	-1.8	0.6	225	0.3	0.2	0.2	266	5.4	5.4	0.4	277	9.7	9.6	-1.2	272	14.7	14.7	-0.5	248	16.2	15.0	6.0	259	4.8	4.7	0.9			
4	97	2.3	-2.3	0.3	169	1.6	-0.3	1.6	271	6.5	6.5	-0.1	275	9.6	9.6	-0.9	250	13.7	12.9	4.7	243	20.0	17.8	9.1	148	3.9	-2.1	3.3			
5	100	1.7	-1.7	0.3	216	0.9	0.5	0.7	274	3.2	3.2	-0.2	275	9.6	9.6	-0.9	244	15.1	13.6	6.6	256	12.5	12.1	3.1	7	10.0	-1.2	-9.9			
6	92	3.0	-3.0	0.1	152	1.9	-0.9	1.7	232	3.9	3.1	2.4	262	8.4	8.3	1.1	260	14.8	14.6	2.5	257	11.9	11.6	2.7	118	4.4	-3.9	2.1			
7	113	2.1	-1.9	0.8	148	1.3	-0.7	1.1	283	3.6	3.5	-0.8	268	5.3	5.3	0.2	267	8.4	8.4	0.4	256	9.1	8.8	2.2	249	2.2	2.1	0.8			
8	110	1.2	-1.1	0.4	216	1.4	0.8	1.1	293	4.6	4.2	-1.8	301	5.2	4.5	-2.7	269	7.9	7.9	0.2	291	6.4	6.0	-2.3	88	6.2	-6.2	-0.2			
9	98	1.4	-1.4	0.2	53	0.5	-0.4	-0.3	283	2.2	2.1	-0.5	282	4.5	4.4	-0.9	290	6.1	5.7	-2.1	265	5.3	5.3	0.5	139	4.5	-3.0	3.4			
10	111	2.2	-2.1	0.8	131	1.8	-1.4	1.2	267	1.8	1.8	0.1	293	2.6	2.4	-1.0	263	5.5	5.5	0.7	249	7.9	7.4	2.8	174	4.5	-0.5	4.5			
11	81	3.7	-3.7	-0.6	127	2.6	-2.1	1.6	198	0.9	0.3	0.9	302	4.9	4.1	-2.6	288	8.5	8.1	-2.7	292	9.2	8.6	-3.4	143	2.0	-1.2	1.6			
12	103	2.6	-2.5	0.6	107	2.7	-2.6	0.8	76	0.4	-0.4	-0.1	213	2.4	1.3	2.0	299	7.9	6.9	-3.9	276	9.0	8.9	-1.0	211	2.1	1.1	1.8			
13	75	2.8	-2.7	-0.7	104	3.3	-3.2	0.8	122	0.9	-0.8	0.5	243	1.6	1.4	0.7	276	5.3	5.3	-0.6	280	8.3	8.2	-1.5	189	2.4	0.4	2.4			
14	135	0.7	-0.5	0.5	133	1.6	-1.2	1.1	114	1.2	-1.1	0.5	265	3.6	3.6	0.3	269	7.4	7.4	0.1	286	4.6	4.4	-1.3	91	4.8	-4.8	0.1			
15	108	2.0	-1.9	0.6	120	2.8	-2.4	1.4	204	1.2	0.5	1.1	267	2.1	2.1	0.1	293	2.3	2.1	-0.9	297	3.0	2.7	-1.4	356	3.1	0.2	-3.1			
16	113	2.3	-2.1	0.9	120	2.2	-1.9	1.1	191	0.5	0.1	0.5	251	3.1	2.9	1.0	281	4.2	4.1	-0.8	263	2.4	2.4	0.3	110	9.0	-8.5	3.1			
17	79	2.0	-2.0	-0.4	117	1.8	-1.6	0.8	239	0.6	0.5	0.3	270	1.0	1.0	0.0	279	1.8	1.8	-0.3	259	3.7	3.6	0.7	90	1.9	-1.9	0.0			
18	79	1.5	-1.5	-0.3	123	1.7	-1.4	0.9	138	1.3	-0.9	1.0	253	4.9	4.7	1.4	255	4.9	4.7	1.3	148	0.9	-0.5	0.8	260	5.2	5.1	0.9			
19	113	2.3	-2.1	0.9	117	1.8	-1.6	0.8	162	0.6	-0.2	0.6	251	3.1	2.9	1.0	268	3.3	3.3	0.1	285	1.6	1.5	-0.4	70	7.2	-6.8	-2.5			
20	103	2.7	-2.6	0.6	138	2.8	-1.9	2.1	304	0.7	0.6	-0.4	253	1.0	1.0	0.3	230	0.8	0.6	0.5	10	7.6	-1.3	-7.5	51	6.5	-5.1	-4.1			
21	101	2.6	-2.6	0.5	125	3.3	-2.7	1.9	126	2.6	-2.1	1.5	259	1.6	1.6	0.3	276	2.8	2.8	-0.3	346	1.6	0.4	-1.6	39	6.5	-4.1	-5.0			
22	95	2.5	-2.5	0.2	110	4.0	-3.8	1.4	96	3.6	-3.6	0.4	156	2.0	-0.8	1.8	256	4.6	4.5	1.1	308	2.4	1.9	-1.5	97	10.0	-9.9	1.2			
23	91	4.6	-4.6	0.1	99	3.6	-3.6	0.6	108	4.1	-3.9	1.3	216	1.7	1.0	1.4	246	3.5	3.2	1.4	339	2.2	0.8	-2.1	64	2.5	-2.3	-1.1			
24	90	4.3	-4.3	0.0	102	4.0	-3.9	0.8	104	1.2	-1.2	0.3	261	1.8	1.8	0.3	321	4.3	2.7	-3.3	332	2.7	1.3	-2.4	70	8.4	-7.9	-2.8			
25	85	3.4	-3.4	-0.3	114	2.4	-2.2	1.0	186	0.9	0.1	0.9	282	1.4	1.4	-0.3	268	2.4	2.4	0.1	344	4.6	1.3	-4.4	95	11.0	-11.0	1.0			
26	103	4.0	-3.9	0.9	97	3.4	-3.4	0.4	137	1.8	-1.2	1.3	236	1.4	1.2	0.8	239	0.6	0.5	0.3	316	3.6	2.5	-2.6	83	5.6	-5.6	-0.7			
27	88	3.1	-3.1	-0.1	105	5.7	-5.5	1.5	107	3.8	-3.6	1.1	158	2.7	-1.0	2.5	114	1.0	-0.9	0.4	241	3.1	2.7	1.5	89	7.8	-7.8	-0.1			
28	102	4.7	-4.6	1.0	107	5.4	-5.2	1.6	120	3.4	-2.9	1.7	195	2.4	0.6	2.3	144	2.2	-1.3	1.8	196	0.7	0.2	0.7	66	9.3	-8.5	-3.8			
29	94	3.1	-3.1	0.2	112	3.5	-3.3	1.3	121	2.7	-2.3	1.4	203	2.8	1.1	2.6	223	3.8	2.6	2.8	290	3.5	3.3	-1.2	93	6.8	-6.8	0.4			
30	100	2.2	-2.2	0.4	133	1.6	-1.2	1.1	185	1.1	0.1	1.1	276	2.8	2.8	-0.3	74	0.7	-0.7	-0.2	70	3.0	-2.8	-1.0	67	11.8	-10.9	-4.6			

Daily Normals of Upper Air Winds (1971-2000)

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SILIGURI

JULY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	102	1.4	-1.4	0.3	109	2.8	-2.6	0.9	275	1.1	1.1	-0.1	227	2.3	1.7	1.6	183	1.9	0.1	1.9	188	2.9	0.4	2.9	99	9.9	-9.8	1.5			
2	120	12.0	###	5.9	108	1.6	-1.5	0.5	171	0.6	-0.1	0.6	230	1.6	1.2	1.0	214	1.4	0.8	1.2	96	4.9	-4.9	0.5	99	10.0	-9.9	1.6			
3	77	1.8	-1.8	-0.4	124	2.2	-1.8	1.2	189	1.9	0.3	1.9	229	1.8	1.4	1.2	235	1.9	1.6	1.1	75	4.7	-4.5	-1.2	120	12.9	-11.2	6.4			
4	72	1.6	-1.5	-0.5	132	1.3	-1.0	0.9	234	2.2	1.8	1.3	272	3.7	3.7	-0.1	354	1.8	0.2	-1.8	106	2.5	-2.4	0.7	105	15.0	-14.5	3.9			
5	117	1.1	-1.0	0.5	114	2.4	-2.2	1.0	130	0.8	-0.6	0.5	245	1.9	1.7	0.8	180	2.1	0.0	2.1	102	2.5	-2.4	0.5	99	17.0	-16.8	2.7			
6	108	2.3	-2.2	0.7	112	4.6	-4.3	1.7	127	2.5	-2.0	1.5	253	1.0	1.0	0.3	150	1.6	-0.8	1.4	61	2.9	-2.5	-1.4	67	10.0	-9.2	-3.9			
7	77	2.2	-2.1	-0.5	109	3.1	-2.9	1.0	104	2.5	-2.4	0.6	165	1.1	-0.3	1.1	9	2.0	-0.3	-2.0	41	5.3	-3.5	-4.0	66	12.2	-11.2	-4.9			
8	158	0.5	-0.2	0.5	103	1.7	-1.7	0.4	140	0.8	-0.5	0.6	202	1.8	0.7	1.7	103	2.3	-2.2	0.5	59	5.7	-4.9	-2.9	88	17.0	-17.0	-0.6			
9	81	1.2	-1.2	-0.2	114	2.7	-2.5	1.1	109	3.7	-3.5	1.2	131	2.0	-1.5	1.3	11	1.5	-0.3	-1.5	324	1.9	1.1	-1.5	19	8.3	-2.7	-7.8			
10	117	3.6	-3.2	1.6	98	3.4	-3.4	0.5	106	4.3	-4.1	1.2	94	1.6	-1.6	0.1	32	1.9	-1.0	-1.6	27	1.6	-0.7	-1.4	40	11.9	-7.7	-9.1			
11	90	5.6	-5.6	0.0	101	5.6	-5.5	1.1	120	5.6	-4.9	2.8	106	5.5	-5.3	1.5	77	2.3	-2.2	-0.5	46	4.2	-3.0	-2.9	64	12.3	-11.1	-5.3			
12	90	4.6	-4.6	0.0	104	4.9	-4.7	1.2	117	4.2	-3.7	1.9	141	3.2	-2.0	2.5	248	0.5	0.5	0.2	355	4.6	0.4	-4.6	65	8.8	-8.0	-3.7			
13	117	2.5	-2.2	1.1	106	3.6	-3.5	1.0	115	5.3	-4.8	2.2	131	2.0	-1.5	1.3	9	0.6	-0.1	-0.6	37	4.9	-2.9	-3.9	82	11.2	-11.1	-1.5			
14	79	3.7	-3.6	-0.7	109	5.3	-5.0	1.7	109	6.0	-5.7	2.0	107	2.4	-2.3	0.7	92	4.9	-4.9	0.2	105	8.7	-8.4	2.2	109	20.0	-18.9	6.5			
15	81	2.5	-2.5	-0.4	122	3.1	-2.6	1.6	129	1.9	-1.5	1.2	95	1.2	-1.2	0.1	62	4.7	-4.2	-2.2	57	7.7	-6.5	-4.2	72	11.9	-11.3	-3.6			
16	140	1.6	-1.0	1.2	137	1.8	-1.2	1.3	183	2.0	0.1	2.0	98	0.7	-0.7	0.1	71	2.8	-2.6	-0.9	85	12.0	-11.9	-1.1	—	—	—	—			
17	90	2.0	-2.0	0.0	137	1.9	-1.3	1.4	155	1.4	-0.6	1.3	140	1.7	-1.1	1.3	86	5.5	-5.5	-0.4	33	6.8	-3.7	-5.7	68	12.0	-11.1	-4.5			
18	93	3.6	-3.6	0.2	117	4.2	-3.7	1.9	122	3.6	-3.0	1.9	111	3.4	-3.2	1.2	18	1.6	-0.5	-1.5	359	6.2	0.1	-6.2	62	12.3	-10.9	-5.8			
19	102	1.4	-1.4	0.3	104	1.6	-1.6	0.4	129	2.1	-1.6	1.3	225	2.0	1.4	1.4	69	5.6	-5.2	-2.0	68	10.1	-9.4	-3.8	65	10.0	-9.1	-4.2			
20	153	1.8	-0.8	1.6	109	3.9	-3.7	1.3	102	5.5	-5.4	1.1	84	2.0	-2.0	-0.2	41	0.9	-0.6	-0.7	59	1.7	-1.5	-0.9	49	14.8	-11.1	-9.8			
21	92	3.6	-3.6	0.1	104	5.4	-5.2	1.3	112	5.5	-5.1	2.1	101	5.3	-5.2	1.0	72	2.6	-2.5	-0.8	67	7.4	-6.8	-2.9	70	13.9	-13.0	-4.8			
22	79	2.5	-2.5	-0.5	119	3.7	-3.2	1.8	139	3.0	-2.0	2.3	102	1.4	-1.4	0.3	65	5.7	-5.2	-2.4	53	9.2	-7.4	-5.5	73	17.8	-17.1	-5.1			
23	90	2.2	-2.2	0.0	102	3.9	-3.8	0.8	111	2.6	-2.4	0.9	96	2.0	-2.0	0.2	103	5.4	-5.3	1.2	81	6.4	-6.3	-1.0	40	21.0	-13.5	-16.1			
24	121	0.6	-0.5	0.3	103	1.8	-1.8	0.4	97	1.6	-1.6	0.2	100	2.9	-2.9	0.5	72	4.0	-3.8	-1.2	57	4.5	-3.8	-2.5	77	15.9	-15.5	-3.6			
25	90	2.2	-2.2	0.0	120	2.0	-1.7	1.0	98	2.2	-2.2	0.3	62	3.6	-3.2	-1.7	11	2.0	-0.4	-2.0	83	10.1	-10.0	-1.3	82	16.7	-16.5	-2.3			
26	100	4.0	-3.9	0.7	121	2.7	-2.3	1.4	117	3.0	-2.7	1.4	107	3.9	-3.7	1.1	78	5.5	-5.4	-1.1	71	14.3	-13.5	-4.7	74	14.0	-13.4	-3.9			
27	83	3.1	-3.1	-0.4	109	3.1	-2.9	1.0	120	2.0	-1.7	1.0	84	2.9	-2.9	-0.3	70	5.4	-5.1	-1.9	102	6.7	-6.6	1.4	110	19.0	-17.8	6.6			
28	88	3.3	-3.3	-0.1	108	4.9	-4.7	1.5	123	5.4	-4.5	2.9	105	4.6	-4.4	1.2	96	0.9	-0.9	0.1	172	0.7	-0.1	0.7	—	—	—	—			
29	115	2.1	-1.9	0.9	120	3.0	-2.6	1.5	122	3.2	-2.7	1.7	114	2.7	-2.5	1.1	74	1.5	-1.4	-0.4	59	5.1	-4.4	-2.6	83	15.7	-15.6	-1.8			
30	59	0.6	-0.5	-0.3	150	1.4	-0.7	1.2	139	1.1	-0.7	0.8	77	1.8	-1.8	-0.4	80	3.9	-3.8	-0.7	68	10.6	-9.8	-4.0	81	21.7	-21.4	-3.4			
31	118	1.7	-1.5	0.8	118	3.0	-2.6	1.4	114	3.9	-3.6	1.6	160	1.5	-0.5	1.4	95	1.1	-1.1	0.1	44	5.6	-3.9	-4.0	90	13.6	-13.6	0.1			

Daily Normals of Upper Air Winds (1971-2000)

SILIGURI

AUGUST

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	135	0.8	-0.6	0.6	108	2.3	-2.2	0.7	104	1.2	-1.2	0.3	212	1.3	0.7	1.1	45	2.1	-1.5	-1.5	344	5.1	1.4	-4.9	72	13.6	-12.9	-4.2			
2	78	1.4	-1.4	-0.3	93	1.9	-1.9	0.1	112	3.1	-2.9	1.2	73	3.1	-3.0	-0.9	51	2.2	-1.7	-1.4	31	3.5	-1.8	-3.0	92	6.4	-6.4	0.2			
3	108	2.5	-2.4	0.8	114	2.7	-2.5	1.1	105	3.1	-3.0	0.8	81	5.3	-5.2	-0.8	65	4.1	-3.7	-1.7	59	7.2	-6.2	-3.7	93	6.3	-6.3	0.3			
4	74	1.9	-1.8	-0.5	117	1.6	-1.4	0.7	104	3.7	-3.6	0.9	93	3.4	-3.4	0.2	76	6.0	-5.8	-1.4	59	4.2	-3.6	-2.2	67	8.6	-7.9	-3.4			
5	83	2.4	-2.4	-0.3	111	4.0	-3.7	1.4	115	4.7	-4.2	2.0	109	4.0	-3.8	1.3	77	5.7	-5.5	-1.3	48	9.0	-6.7	-6.0	97	10.7	-10.6	1.3			
6	102	1.9	-1.9	0.4	108	3.8	-3.6	1.2	107	4.8	-4.6	1.4	112	4.8	-4.4	1.8	108	5.2	-4.9	1.6	102	4.5	-4.4	0.9	109	14.6	-13.8	4.7			
7	113	1.3	-1.2	0.5	153	1.1	-0.5	1.0	105	2.7	-2.6	0.7	117	4.8	-4.3	2.2	69	5.6	-5.2	-2.0	106	10.7	-10.3	2.9	62	12.0	-10.6	-5.6			
8	102	2.5	-2.4	0.5	129	3.2	-2.5	2.0	112	4.8	-4.4	1.8	99	1.3	-1.3	0.2	76	7.2	-7.0	-1.8	84	13.0	-12.9	-1.3	87	18.0	-18.0	-1.1			
9	72	2.0	-1.9	-0.6	125	1.9	-1.6	1.1	128	1.6	-1.3	1.0	143	1.5	-0.9	1.2	78	5.7	-5.6	-1.2	78	10.7	-10.5	-2.3	87	17.3	-17.3	-0.8			
10	94	1.5	-1.5	0.1	96	1.0	-1.0	0.1	105	1.1	-1.1	0.3	49	0.9	-0.7	-0.6	4	2.6	-0.2	-2.6	59	6.2	-5.3	-3.2	76	12.9	-12.5	-3.2			
11	107	3.0	-2.9	0.9	117	2.7	-2.4	1.2	132	3.9	-2.9	2.6	84	1.0	-1.0	-0.1	80	4.6	-4.5	-0.8	77	6.4	-6.2	-1.4	94	13.7	-13.7	0.9			
12	102	2.4	-2.3	0.5	117	2.9	-2.6	1.3	146	2.7	-1.5	2.2	133	3.7	-2.7	2.5	127	4.4	-3.5	2.6	43	5.4	-3.7	-4.0	62	15.1	-13.3	-7.1			
13	82	2.2	-2.2	-0.3	99	3.0	-3.0	0.5	83	2.5	-2.5	-0.3	70	2.0	-1.9	-0.7	100	5.9	-5.8	1.0	74	7.5	-7.2	-2.1	101	9.9	-9.7	1.9			
14	98	2.7	-2.7	0.4	115	2.1	-1.9	0.9	112	2.4	-2.2	0.9	138	2.5	-1.7	1.9	128	1.6	-1.3	1.0	82	8.4	-8.3	-1.2	101	8.7	-8.6	1.6			
15	92	2.8	-2.8	0.1	117	2.8	-2.5	1.3	122	2.2	-1.9	1.2	203	0.8	0.3	0.7	82	4.4	-4.4	-0.6	68	5.4	-5.0	-2.0	108	6.5	-6.2	2.0			
16	135	0.7	-0.5	0.5	115	2.6	-2.4	1.1	108	3.3	-3.1	1.0	349	2.1	0.4	-2.1	84	3.8	-3.8	-0.4	97	8.5	-8.4	1.0	88	12.2	-12.2	-0.5			
17	83	2.6	-2.6	-0.3	129	3.8	-3.0	2.4	116	3.9	-3.5	1.7	92	2.6	-2.6	0.1	95	5.4	-5.4	0.5	68	11.3	-10.5	-4.2	73	12.1	-11.6	-3.6			
18	95	3.3	-3.3	0.3	102	3.5	-3.4	0.7	121	4.5	-3.9	2.3	159	1.9	-0.7	1.8	67	3.0	-2.8	-1.2	56	10.3	-8.5	-5.8	72	13.2	-12.5	-4.1			
19	122	2.6	-2.2	1.4	123	2.7	-2.3	1.5	112	3.2	-3.0	1.2	354	1.0	0.1	-1.0	48	4.0	-3.0	-2.7	61	7.3	-6.4	-3.5	72	15.6	-14.9	-4.7			
20	97	2.6	-2.6	0.3	116	3.4	-3.1	1.5	125	2.8	-2.3	1.6	139	1.1	-0.7	0.8	35	7.2	-4.2	-5.9	27	2.2	-1.0	-2.0	60	7.0	-6.1	-3.5			
21	87	1.8	-1.8	-0.1	109	2.8	-2.6	0.9	139	1.8	-1.2	1.4	213	2.4	1.3	2.0	352	0.7	0.1	-0.7	322	4.7	2.9	-3.7	88	14.8	-14.8	-0.6			
22	112	1.6	-1.5	0.6	99	3.7	-3.7	0.6	116	2.8	-2.5	1.2	213	2.0	1.1	1.7	17	1.4	-0.4	-1.3	159	2.6	-0.9	2.4	77	12.6	-12.3	-2.8			
23	162	1.3	-0.4	1.2	108	2.6	-2.5	0.8	110	2.3	-2.2	0.8	214	1.1	0.6	0.9	42	1.2	-0.8	-0.9	342	2.2	0.7	-2.1	91	10.7	-10.7	0.1			
24	90	1.2	-1.2	0.0	118	1.5	-1.3	0.7	99	2.0	-2.0	0.3	192	1.4	0.3	1.4	301	4.4	3.8	-2.3	288	3.5	3.3	-1.1	75	6.4	-6.2	-1.7			
25	144	1.7	-1.0	1.4	142	2.3	-1.4	1.8	105	1.6	-1.5	0.4	278	0.7	0.7	-0.1	349	3.3	0.6	-3.2	83	8.4	-8.3	-1.0	86	13.5	-13.5	-0.9			
26	110	1.2	-1.1	0.4	128	1.6	-1.3	1.0	113	2.1	-1.9	0.8	98	2.1	-2.1	0.3	71	11.6	-11.0	-3.7	83	14.0	-13.9	-1.6	27	22.0	-10.0	-19.6			
27	104	1.6	-1.6	0.4	109	3.9	-3.7	1.3	90	4.2	-4.2	0.0	79	0.5	-0.5	-0.1	31	2.7	-1.4	-2.3	24	1.7	-0.7	-1.6	75	7.8	-7.5	-2.0			
28	107	1.7	-1.6	0.5	101	2.5	-2.5	0.5	103	2.8	-2.7	0.6	94	1.3	-1.3	0.1	34	3.2	-1.8	-2.7	32	3.6	-1.9	-3.1	67	10.0	-9.2	-4.0			
29	88	2.7	-2.7	-0.1	111	1.7	-1.6	0.6	112	2.9	-2.7	1.1	169	1.0	-0.2	1.0	98	1.4	-1.4	0.2	23	2.6	-1.0	-2.4	63	9.5	-8.5	-4.3			
30	90	2.4	-2.4	0.0	115	3.1	-2.8	1.3	122	3.1	-2.6	1.6	126	1.4	-1.1	0.8	307	0.5	0.4	-0.3	12	3.3	-0.7	-3.2	87	6.9	-6.9	-0.4			
31	104	2.5	-2.4	0.6	111	1.9	-1.8	0.7	108	4.1	-3.9	1.3	131	3.0	-2.3	2.0	153	0.7	-0.3	0.6	351	2.5	0.4	-2.5	66	5.2	-4.8	-2.1			

Daily Normals of Upper Air Winds (1971-2000)

SILIGURI

SEPTEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	107	4.1	-3.9	1.2	122	3.6	-3.0	1.9	122	3.8	-3.2	2.0	99	3.0	-3.0	0.5	139	2.0	-1.3	1.5	14	2.9	-0.7	-2.8	92	7.2	-7.2	0.2
2	92	2.8	-2.8	0.1	104	2.5	-2.4	0.6	118	3.0	-2.6	1.4	90	0.9	-0.9	0.0	90	1.6	-1.6	0.0	41	2.8	-1.8	-2.1	76	8.1	-7.9	-1.9
3	97	3.1	-3.1	0.4	112	2.2	-2.0	0.8	126	1.7	-1.4	1.0	130	1.6	-1.2	1.0	58	2.2	-1.9	-1.2	26	6.4	-2.8	-5.8	80	11.7	-11.5	-2.1
4	102	1.9	-1.9	0.4	107	3.7	-3.5	1.1	120	3.6	-3.1	1.8	129	1.4	-1.1	0.9	54	3.2	-2.6	-1.9	75	3.8	-3.7	-1.0	78	8.0	-7.8	-1.7
5	117	2.5	-2.2	1.1	113	3.9	-3.6	1.5	118	3.4	-3.0	1.6	108	1.9	-1.8	0.6	322	3.4	2.1	-2.7	334	4.6	2.0	-4.1	69	12.0	-11.2	-4.2
6	138	1.5	-1.0	1.1	119	1.0	-0.9	0.5	107	1.0	-1.0	0.3	113	1.5	-1.4	0.6	99	3.0	-3.0	0.5	310	0.8	0.6	-0.5	109	9.3	-8.8	3.0
7	96	1.8	-1.8	0.2	81	1.8	-1.8	-0.3	118	3.2	-2.8	1.5	128	4.3	-3.4	2.7	88	2.4	-2.4	-0.1	57	2.0	-1.7	-1.1	100	10.6	-10.4	1.9
8	107	2.1	-2.0	0.6	127	3.1	-2.5	1.9	106	2.6	-2.5	0.7	201	2.2	0.8	2.1	63	0.2	-0.2	-0.1	360	1.3	0.0	-1.3	100	10.1	-9.9	1.8
9	106	2.5	-2.4	0.7	110	2.9	-2.7	1.0	119	3.5	-3.1	1.7	254	1.5	1.4	0.4	240	1.4	1.2	0.7	23	3.9	-1.5	-3.6	87	8.5	-8.5	-0.5
10	131	2.0	-1.5	1.3	108	3.6	-3.4	1.1	128	5.1	-4.0	3.1	191	1.6	0.3	1.6	157	3.3	-1.3	3.0	321	0.6	0.4	-0.5	89	8.0	-8.0	-0.1
11	104	1.2	-1.2	0.3	121	2.1	-1.8	1.1	104	2.9	-2.8	0.7	208	2.6	1.2	2.3	147	2.0	-1.1	1.7	254	1.9	1.8	0.5	109	7.3	-6.9	2.4
12	111	0.9	-0.8	0.3	118	1.5	-1.3	0.7	122	2.2	-1.9	1.2	196	2.2	0.6	2.1	285	1.6	1.5	-0.4	304	0.4	0.3	-0.2	121	7.1	-6.1	3.7
13	108	2.0	-1.9	0.6	112	2.4	-2.2	0.9	125	2.8	-2.3	1.6	196	1.9	0.5	1.8	86	1.4	-1.4	-0.1	24	3.5	-1.4	-3.2	115	8.1	-7.4	3.4
14	148	0.9	-0.5	0.8	108	2.6	-2.5	0.8	100	2.9	-2.9	0.5	207	0.4	0.2	0.4	213	6.3	3.4	5.3	219	1.4	0.9	1.1	74	5.5	-5.3	-1.5
15	162	0.6	-0.2	0.6	114	2.4	-2.2	1.0	131	1.1	-0.8	0.7	232	3.7	2.9	2.3	268	2.9	2.9	0.1	262	2.1	2.1	0.3	130	3.3	-2.5	2.1
16	128	1.1	-0.9	0.7	109	2.1	-2.0	0.7	84	1.8	-1.8	-0.2	264	1.9	1.9	0.2	263	4.1	4.1	0.5	291	2.5	2.3	-0.9	329	0.6	0.3	-0.5
17	88	2.5	-2.5	-0.1	184	1.3	0.1	1.3	267	1.8	1.8	0.1	264	4.1	4.1	0.4	268	2.8	2.8	0.1	249	4.4	4.1	1.6	72	2.6	-2.5	-0.8
18	126	0.9	-0.7	0.5	214	1.1	0.6	0.9	302	0.9	0.8	-0.5	254	4.1	3.9	1.1	282	5.8	5.7	-1.2	275	6.9	6.9	-0.6	250	2.7	2.5	0.9
19	151	1.0	-0.5	0.9	141	1.4	-0.9	1.1	90	0.5	-0.5	0.0	241	2.6	2.3	1.3	265	6.8	6.8	0.6	252	6.3	6.0	1.9	154	9.0	-3.9	8.1
20	103	1.8	-1.8	0.4	90	1.2	-1.2	0.0	103	1.7	-1.7	0.4	160	2.0	-0.7	1.9	241	3.5	3.1	1.7	244	7.1	6.4	3.1	174	1.9	-0.2	1.9
21	98	1.5	-1.5	0.2	99	1.2	-1.2	0.2	9	0.6	-0.1	-0.6	304	1.8	1.5	-1.0	264	6.1	6.1	0.6	259	7.6	7.4	1.5	158	5.0	-1.9	4.6
22	115	2.1	-1.9	0.9	146	1.1	-0.6	0.9	171	1.3	-0.2	1.3	268	5.2	5.2	0.2	261	6.1	6.0	0.9	228	7.1	5.3	4.7	—	—	—	—
23	95	2.1	-2.1	0.2	112	1.6	-1.5	0.6	159	0.9	-0.3	0.8	297	0.7	0.6	-0.3	286	5.2	5.0	-1.4	284	4.5	4.4	-1.1	333	0.4	0.2	-0.4
24	117	1.1	-1.0	0.5	111	1.7	-1.6	0.6	189	0.6	0.1	0.6	273	2.1	2.1	-0.1	266	9.0	9.0	0.7	279	8.8	8.7	-1.4	360	0.4	0.0	-0.4
25	219	2.1	1.3	1.6	233	1.5	1.2	0.9	277	3.2	3.2	-0.4	272	6.7	6.7	-0.2	264	10.5	10.4	1.1	259	10.2	10.0	2.0	293	7.4	6.8	-2.9
26	77	1.7	-1.7	-0.4	180	1.2	0.0	1.2	225	1.1	0.8	0.8	273	4.1	4.1	-0.2	265	8.3	8.3	0.7	253	11.9	11.4	3.5	245	5.5	5.0	2.3
27	92	3.5	-3.5	0.1	78	3.8	-3.7	-0.8	75	2.0	-1.9	-0.5	333	2.0	0.9	-1.8	269	4.3	4.3	0.1	238	8.2	7.0	4.3	126	3.1	-2.5	1.8
28	90	1.6	-1.6	0.0	157	1.3	-0.5	1.2	267	1.8	1.8	0.1	274	4.7	4.7	-0.3	276	12.7	12.6	-1.4	257	13.9	13.6	3.1	22	1.1	-0.4	-1.0
29	278	0.7	0.7	-0.1	246	1.0	0.9	0.4	270	3.3	3.3	0.0	262	6.4	6.3	0.9	268	11.0	11.0	0.4	251	10.6	10.0	3.5	253	4.4	4.2	1.3
30	76	0.8	-0.8	-0.2	249	0.9	0.8	0.3	241	2.6	2.3	1.3	282	12.3	12.0	-2.6	262	14.8	14.7	2.0	246	21.5	19.7	8.7	203	4.1	1.6	3.8

Daily Normals of Upper Air Winds (1971-2000)

SILIGURI

OCTOBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	202	1.1	0.4	1.0	288	0.6	0.6	-0.2	282	1.9	1.9	-0.4	262	8.9	8.8	1.2	280	9.1	9.0	-1.6	257	8.1	7.9	1.8	90	1.5	-1.5	0.0
2	243	0.4	0.4	0.2	253	1.0	1.0	0.3	285	2.0	1.9	-0.5	268	9.3	9.3	0.4	248	12.4	11.5	4.6	243	19.0	16.9	8.7	215	7.1	4.1	5.8
3	218	1.6	1.0	1.3	216	1.4	0.8	1.1	301	2.3	2.0	-1.2	268	6.0	6.0	0.2	244	13.6	12.2	5.9	249	13.6	12.7	4.8	182	5.0	0.2	5.0
4	255	1.1	1.1	0.3	225	0.8	0.6	0.6	294	1.7	1.6	-0.7	255	7.1	6.9	1.8	263	15.5	15.4	2.0	265	17.8	17.7	1.4	7	2.6	-0.3	-2.6
5	220	0.8	0.5	0.6	180	0.1	0.0	0.1	180	0.5	0.0	0.5	256	6.5	6.3	1.6	258	15.0	14.7	3.1	255	18.7	18.0	4.9	259	10.2	10.0	2.0
6	128	1.8	-1.4	1.1	238	0.9	0.8	0.5	252	1.6	1.5	0.5	267	8.1	8.1	0.4	259	15.0	14.7	2.8	263	13.3	13.2	1.6	315	1.1	0.8	-0.8
7	225	0.8	0.6	0.6	173	0.8	-0.1	0.8	277	1.7	1.7	-0.2	260	7.8	7.7	1.3	247	13.2	12.2	5.1	238	13.6	11.5	7.2	250	4.8	4.5	1.6
8	239	2.3	2.0	1.2	250	1.2	1.1	0.4	278	2.1	2.1	-0.3	253	9.3	8.9	2.7	240	16.4	14.2	8.3	248	18.3	16.9	7.0	270	12.7	12.7	0.0
9	228	1.2	0.9	0.8	236	0.7	0.6	0.4	214	1.4	0.8	1.2	259	8.1	8.0	1.5	249	19.1	17.9	6.8	242	15.0	13.2	7.1	243	11.1	9.9	5.1
10	239	2.7	2.3	1.4	261	1.8	1.8	0.3	263	2.4	2.4	0.3	280	9.8	9.7	-1.7	280	19.1	18.8	-3.2	272	12.5	12.5	-0.5	245	7.8	7.1	3.3
11	245	1.9	1.7	0.8	253	1.0	1.0	0.3	272	2.3	2.3	-0.1	265	12.3	12.3	1.0	247	20.4	18.7	8.1	250	14.6	13.8	4.9	279	10.2	10.1	-1.6
12	240	0.8	0.7	0.4	250	1.2	1.1	0.4	284	3.6	3.5	-0.9	265	10.0	10.0	0.8	248	17.4	16.1	6.6	256	22.3	21.6	5.4	273	9.3	9.3	-0.5
13	253	1.7	1.6	0.5	180	0.6	0.0	0.6	18	0.6	-0.2	-0.6	273	11.2	11.2	-0.6	262	15.6	15.4	2.2	268	18.2	18.2	0.7	275	16.0	15.9	-1.4
14	234	0.9	0.7	0.5	256	0.8	0.8	0.2	280	2.3	2.3	-0.4	272	9.8	9.8	-0.4	270	15.9	15.9	0.0	237	23.4	19.5	12.9	265	16.4	16.3	1.4
15	145	1.2	-0.7	1.0	180	0.7	0.0	0.7	277	3.2	3.2	-0.4	264	10.2	10.1	1.1	242	15.9	14.1	7.4	236	32.8	27.2	18.4	249	11.0	10.2	4.0
16	242	1.7	1.5	0.8	191	0.5	0.1	0.5	284	1.2	1.2	-0.3	266	7.9	7.9	0.5	259	18.9	18.5	3.7	260	25.5	25.1	4.3	239	13.0	11.2	6.6
17	212	0.9	0.5	0.8	260	1.1	1.1	0.2	284	2.5	2.4	-0.6	269	10.4	10.4	0.1	272	18.3	18.3	-0.7	267	16.6	16.6	0.9	242	7.6	6.7	3.5
18	212	0.9	0.5	0.8	241	1.0	0.9	0.5	286	3.6	3.5	-1.0	277	11.7	11.6	-1.4	277	21.8	21.7	-2.5	272	21.9	21.9	-0.9	271	16.5	16.5	-0.3
19	198	0.6	0.2	0.6	166	0.4	-0.1	0.4	360	0.9	0.0	-0.9	275	11.6	11.5	-1.1	277	19.9	19.8	-2.4	272	29.8	29.8	-0.8	263	18.6	18.5	2.3
20	108	0.6	-0.6	0.2	257	0.9	0.9	0.2	259	3.1	3.0	0.6	273	11.4	11.4	-0.5	267	20.9	20.9	1.2	259	19.7	19.3	3.9	266	20.7	20.6	1.6
21	229	1.8	1.4	1.2	211	1.2	0.6	1.0	162	0.3	-0.1	0.3	272	12.0	12.0	-0.4	263	25.4	25.2	3.2	251	32.6	30.9	10.5	259	27.2	26.7	5.1
22	218	1.1	0.7	0.9	18	0.6	-0.2	-0.6	360	0.2	0.0	-0.2	273	8.8	8.8	-0.4	266	21.5	21.4	1.5	264	20.0	19.9	2.0	225	8.2	5.8	5.8
23	186	0.9	0.1	0.9	113	0.8	-0.7	0.3	353	0.8	0.1	-0.8	268	12.8	12.8	0.4	262	23.9	23.6	3.5	238	26.8	22.8	14.0	250	16.1	15.1	5.6
24	198	0.9	0.3	0.9	117	0.7	-0.6	0.3	171	0.6	-0.1	0.6	267	12.7	12.7	0.6	273	22.3	22.3	-1.0	260	25.5	25.1	4.5	243	15.7	14.0	7.1
25	209	1.0	0.5	0.9	180	0.6	0.0	0.6	279	1.2	1.2	-0.2	277	11.6	11.5	-1.4	265	17.7	17.6	1.4	268	22.8	22.8	0.8	274	11.3	11.3	-0.8
26	189	0.6	0.1	0.6	256	0.4	0.4	0.1	276	2.0	2.0	-0.2	275	13.2	13.1	-1.2	260	20.6	20.3	3.7	259	19.7	19.4	3.6	229	9.0	6.8	5.9
27	110	1.2	-1.1	0.4	94	1.4	-1.4	0.1	295	1.4	1.3	-0.6	279	11.1	11.0	-1.7	266	19.8	19.8	1.4	257	19.6	19.1	4.4	282	24.6	24.0	-5.3
28	125	2.4	-2.0	1.4	153	0.2	-0.1	0.2	75	1.1	-1.1	-0.3	280	12.5	12.3	-2.1	269	21.5	21.5	0.3	270	36.6	36.6	0.3	—	—	—	—
29	157	0.8	-0.3	0.7	153	1.1	-0.5	1.0	18	0.6	-0.2	-0.6	272	8.3	8.3	-0.3	249	24.6	23.0	8.7	227	27.7	20.2	19.0	217	11.9	7.1	9.5
30	225	0.3	0.2	0.2	120	0.8	-0.7	0.4	97	0.8	-0.8	0.1	271	9.9	9.9	-0.1	270	19.8	19.8	0.0	270	17.1	17.1	0.0	274	16.4	16.4	-1.1
31	117	0.7	-0.6	0.3	135	0.1	-0.1	0.1	321	1.3	0.8	-1.0	267	11.3	11.3	0.5	263	22.5	22.3	2.6	270	29.6	29.6	-0.2	233	19.0	15.2	11.4

Daily Normals of Upper Air Winds (1971-2000)

SILIGURI

NOVEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	214	0.7	0.4	0.6	233	0.5	0.4	0.3	289	1.8	1.7	-0.6	274	12.1	12.1	-0.9	257	30.9	30.2	6.7	262	26.7	26.5	3.6	273	13.2	13.2	-0.7
2	247	1.3	1.2	0.5	236	1.1	0.9	0.6	291	2.2	2.1	-0.8	275	12.8	12.8	-1.1	267	20.7	20.7	1.1	258	32.0	31.2	6.9	260	19.4	19.1	3.2
3	153	0.4	-0.2	0.4	104	0.8	-0.8	0.2	45	0.6	-0.4	-0.4	282	9.8	9.6	-2.1	258	19.3	18.9	4.1	227	15.1	11.1	10.2	246	24.0	21.9	9.8
4	256	0.4	0.4	0.1	360	0.1	0.0	-0.1	14	1.6	-0.4	-1.6	284	12.8	12.4	-3.0	283	19.6	19.1	-4.4	282	20.8	20.4	-4.3	282	11.7	11.5	-2.4
5	189	0.6	0.1	0.6	270	0.7	0.7	0.0	291	0.9	0.8	-0.3	279	12.6	12.4	-2.0	265	23.5	23.4	1.9	263	30.7	30.5	3.9	266	16.9	16.9	1.2
6	198	0.3	0.1	0.3	252	1.9	1.8	0.6	298	4.1	3.6	-1.9	279	16.7	16.5	-2.6	284	28.0	27.2	-6.8	279	33.4	33.0	-5.0	281	28.5	27.9	-5.6
7	214	0.7	0.4	0.6	198	0.3	0.1	0.3	310	1.6	1.2	-1.0	282	13.4	13.1	-2.9	286	26.5	25.5	-7.1	273	27.0	27.0	-1.4	274	19.9	19.8	-1.5
8	117	1.1	-1.0	0.5	117	0.4	-0.4	0.2	326	0.4	0.2	-0.3	282	10.0	9.8	-2.1	275	23.1	23.0	-2.0	274	32.7	32.6	-2.0	280	13.2	13.0	-2.4
9	217	1.0	0.6	0.8	159	0.9	-0.3	0.8	313	1.8	1.3	-1.2	284	14.5	14.0	-3.6	268	17.9	17.9	0.6	275	30.8	30.7	-2.7	275	24.7	24.6	-2.0
10	99	1.3	-1.3	0.2	82	0.7	-0.7	-0.1	303	2.0	1.7	-1.1	284	15.1	14.6	-3.7	274	27.9	27.8	-2.1	275	30.1	30.0	-2.7	277	18.5	18.4	-2.3
11	195	1.1	0.3	1.1	153	0.2	-0.1	0.2	347	1.3	0.3	-1.3	287	12.2	11.7	-3.6	274	28.0	27.9	-2.1	284	25.7	24.9	-6.3	284	21.0	20.3	-5.2
12	228	1.5	1.1	1.0	239	0.6	0.5	0.3	290	2.7	2.5	-0.9	287	12.1	11.6	-3.5	282	23.5	23.0	-4.7	277	22.2	22.0	-2.6	262	16.9	16.7	2.3
13	233	1.0	0.8	0.6	202	0.5	0.2	0.5	300	1.4	1.2	-0.7	296	10.6	9.5	-4.6	284	22.2	21.6	-5.2	274	28.7	28.6	-2.1	262	6.5	6.4	0.9
14	194	0.4	0.1	0.4	261	0.6	0.6	0.1	298	2.4	2.1	-1.1	284	15.2	14.7	-3.7	270	22.7	22.7	-0.1	278	32.1	31.8	-4.6	265	34.6	34.5	2.9
15	279	0.6	0.6	-0.1	231	0.6	0.5	0.4	274	2.9	2.9	-0.2	282	14.7	14.4	-3.0	277	23.3	23.1	-2.9	260	30.0	29.6	5.0	287	28.9	27.6	-8.6
16	180	0.8	0.0	0.8	243	0.2	0.2	0.1	294	2.4	2.2	-1.0	287	13.6	13.0	-3.9	275	22.8	22.7	-2.0	258	33.3	32.5	7.2	265	20.4	20.3	1.7
17	220	0.8	0.5	0.6	256	0.4	0.4	0.1	297	2.7	2.4	-1.2	285	13.6	13.1	-3.6	276	29.0	28.8	-3.2	263	30.3	30.0	3.9	273	19.9	19.9	-1.0
18	248	1.6	1.5	0.6	104	0.4	-0.4	0.1	356	1.6	0.1	-1.6	286	13.6	13.1	-3.7	265	26.0	25.9	2.1	252	36.3	34.6	11.0	288	7.6	7.2	-2.4
19	231	0.6	0.5	0.4	207	1.3	0.6	1.2	284	3.0	2.9	-0.7	272	13.9	13.9	-0.6	270	33.0	33.0	-0.2	258	42.0	41.2	8.4	253	41.4	39.5	12.4
20	252	0.9	0.9	0.3	240	0.8	0.7	0.4	319	2.3	1.5	-1.7	276	13.3	13.2	-1.3	261	31.4	31.0	5.0	263	40.2	39.9	5.0	271	27.4	27.4	-0.5
21	156	1.0	-0.4	0.9	267	1.7	1.7	0.1	298	3.4	3.0	-1.6	278	15.0	14.9	-2.1	278	27.0	26.7	-3.7	261	32.2	31.8	4.8	253	21.5	20.6	6.3
22	126	1.4	-1.1	0.8	104	1.2	-1.2	0.3	315	2.5	1.8	-1.8	280	16.8	16.5	-3.0	274	30.0	29.9	-2.2	252	24.2	23.0	7.5	261	25.7	25.4	4.0
23	238	1.5	1.3	0.8	186	1.0	0.1	1.0	281	6.9	6.8	-1.3	279	20.3	20.1	-3.1	275	34.4	34.3	-3.1	252	36.1	34.3	11.3	270	34.0	34.0	0.0
24	250	2.9	2.7	1.0	245	1.7	1.5	0.7	289	4.0	3.8	-1.3	285	19.2	18.5	-5.0	280	32.2	31.7	-5.8	277	29.4	29.2	-3.5	247	31.7	29.3	12.2
25	148	0.9	-0.5	0.8	220	0.8	0.5	0.6	272	3.0	3.0	-0.1	292	15.6	14.5	-5.8	276	30.1	30.0	-3.0	283	35.6	34.7	-8.0	275	19.0	18.9	-1.5
26	221	0.9	0.6	0.7	249	0.9	0.8	0.3	282	4.4	4.3	-0.9	285	20.4	19.7	-5.4	279	38.0	37.5	-5.9	270	32.8	32.8	-0.1	262	24.9	24.7	3.5
27	253	1.4	1.3	0.4	217	1.5	0.9	1.2	298	4.5	4.0	-2.1	280	19.8	19.5	-3.3	265	36.3	36.2	3.1	273	20.2	20.2	-1.0	266	26.0	26.0	1.6
28	260	1.1	1.1	0.2	159	0.9	-0.3	0.8	288	5.1	4.8	-1.6	270	19.5	19.5	0.1	281	32.9	32.3	-6.3	275	31.6	31.5	-2.7	304	11.0	9.1	-6.1
29	157	0.8	-0.3	0.7	202	0.5	0.2	0.5	287	4.4	4.2	-1.3	284	16.4	15.9	-4.0	272	33.3	33.3	-1.0	245	47.6	43.1	20.2	260	29.5	29.1	4.9
30	238	1.5	1.3	0.8	263	2.5	2.5	0.3	284	6.2	6.0	-1.5	287	18.7	17.8	-5.6	265	34.3	34.2	3.2	252	35.8	34.1	10.9	252	31.2	29.7	9.4

Daily Normals of Upper Air Winds (1971-2000)

SILIGURI

DECEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	253	1.0	1.0	0.3	277	0.8	0.8	-0.1	295	4.3	3.9	-1.8	284	18.3	17.8	-4.3	266	25.8	25.8	1.6	267	33.7	33.6	1.9	275	13.0	12.9	-1.2
2	191	0.5	0.1	0.5	315	0.4	0.3	-0.3	335	1.4	0.6	-1.3	287	13.4	12.8	-4.0	280	35.5	34.9	-6.4	266	28.3	28.2	1.8	287	15.4	14.8	-4.4
3	257	1.3	1.3	0.3	315	0.3	0.2	-0.2	283	2.3	2.2	-0.5	289	15.6	14.7	-5.2	281	25.8	25.3	-4.9	262	41.0	40.6	5.7	251	35.0	33.1	11.4
4	210	0.8	0.4	0.7	252	0.3	0.3	0.1	349	0.5	0.1	-0.5	287	13.7	13.1	-3.9	283	24.7	24.1	-5.4	267	38.9	38.9	1.8	266	20.8	20.8	1.3
5	250	1.5	1.4	0.5	135	0.3	-0.2	0.2	304	2.3	1.9	-1.3	299	15.8	13.8	-7.7	302	25.8	21.8	-13.8	281	39.7	38.9	-7.7	278	34.5	34.2	-4.6
6	243	1.1	1.0	0.5	236	0.4	0.3	0.2	299	2.1	1.8	-1.0	293	14.8	13.6	-5.8	289	30.5	28.9	-9.7	281	35.2	34.6	-6.7	285	15.4	14.9	-3.9
7	198	0.6	0.2	0.6	131	0.9	-0.7	0.6	5	1.1	-0.1	-1.1	288	14.6	13.9	-4.6	295	25.1	22.8	-10.5	280	29.2	28.8	-4.9	270	39.0	39.0	0.0
8	225	0.7	0.5	0.5	149	0.6	-0.3	0.5	300	5.0	4.3	-2.5	289	19.7	18.6	-6.5	278	34.6	34.2	-5.0	267	41.1	41.0	2.3	273	29.8	29.7	-1.8
9	180	0.3	0.0	0.3	180	0.5	0.0	0.5	318	2.7	1.8	-2.0	294	18.1	16.5	-7.5	290	40.7	38.3	-13.8	278	38.8	38.4	-5.7	—	—	—	—
10	124	0.4	-0.3	0.2	164	0.7	-0.2	0.7	278	3.4	3.4	-0.5	281	20.7	20.3	-4.0	274	35.2	35.1	-2.6	253	37.5	35.9	10.9	266	32.7	32.6	2.2
11	241	3.3	2.9	1.6	236	1.8	1.5	1.0	300	3.0	2.6	-1.5	288	20.3	19.3	-6.3	283	33.8	33.0	-7.4	274	34.4	34.3	-2.3	282	39.9	39.0	-8.5
12	143	0.5	-0.3	0.4	270	0.4	0.4	0.0	292	5.5	5.1	-2.1	284	15.4	14.9	-3.8	284	31.4	30.5	-7.6	275	42.6	42.5	-3.5	276	24.9	24.8	-2.4
13	256	1.2	1.2	0.3	270	0.8	0.8	0.0	282	4.4	4.3	-0.9	292	18.5	17.2	-6.9	274	34.9	34.8	-2.3	274	37.3	37.2	-2.9	272	35.6	35.6	-1.2
14	243	0.9	0.8	0.4	302	1.3	1.1	-0.7	283	4.4	4.3	-1.0	283	17.4	16.9	-4.0	282	33.8	33.0	-7.2	290	30.0	28.1	-10.4	293	25.2	23.3	-9.7
15	225	1.7	1.2	1.2	135	0.1	-0.1	0.1	322	3.7	2.3	-2.9	285	17.5	16.9	-4.6	290	31.6	29.7	-10.8	288	48.5	46.2	-14.9	303	29.5	24.8	-15.9
16	189	0.6	0.1	0.6	131	0.9	-0.7	0.6	281	1.6	1.6	-0.3	285	19.3	18.6	-5.1	275	30.8	30.7	-2.6	281	36.6	35.9	-7.3	276	29.9	29.8	-2.9
17	231	0.6	0.5	0.4	108	0.6	-0.6	0.2	322	2.4	1.5	-1.9	285	17.6	17.0	-4.6	289	29.3	27.7	-9.7	282	42.3	41.4	-8.8	294	19.2	17.6	-7.7
18	219	0.6	0.4	0.5	126	1.9	-1.5	1.1	90	1.2	-1.2	0.0	295	12.6	11.4	-5.4	295	26.4	23.9	-11.1	294	40.7	37.1	-16.8	297	33.0	29.4	-15.0
19	250	1.2	1.1	0.4	293	0.8	0.7	-0.3	290	2.9	2.7	-1.0	285	13.0	12.5	-3.4	288	25.6	24.4	-7.8	304	33.1	27.4	-18.5	303	26.3	22.1	-14.2
20	231	1.3	1.0	0.8	123	2.0	-1.7	1.1	296	2.8	2.5	-1.2	288	17.6	16.8	-5.3	289	24.8	23.4	-8.1	286	39.7	38.2	-10.8	287	24.8	23.7	-7.3
21	202	0.5	0.2	0.5	129	0.6	-0.5	0.4	310	2.6	2.0	-1.7	296	15.3	13.7	-6.7	294	29.2	26.7	-11.7	283	35.2	34.3	-8.1	263	42.0	41.7	5.1
22	294	7.0	6.4	-2.9	117	1.1	-1.0	0.5	283	1.7	1.7	-0.4	296	18.2	16.3	-8.0	290	28.7	27.0	-9.6	282	37.8	37.0	-7.6	288	19.4	18.5	-6.0
23	198	0.6	0.2	0.6	124	1.1	-0.9	0.6	294	3.5	3.2	-1.4	283	15.6	15.2	-3.5	284	26.5	25.7	-6.5	276	42.6	42.4	-4.1	276	16.6	16.5	-1.8
24	180	1.6	0.0	1.6	110	1.2	-1.1	0.4	45	1.6	-1.1	-1.1	282	16.9	16.5	-3.5	269	26.9	26.9	0.6	274	47.7	47.6	-3.6	283	25.2	24.5	-5.7
25	180	0.6	0.0	0.6	135	0.8	-0.6	0.6	268	2.3	2.3	0.1	292	13.1	12.1	-4.9	283	32.0	31.2	-7.3	281	39.1	38.4	-7.3	292	29.8	27.7	-11.1
26	253	1.4	1.3	0.4	360	0.3	0.0	-0.3	278	3.4	3.4	-0.5	286	15.7	15.1	-4.2	268	26.6	26.6	1.1	277	29.3	29.1	-3.8	288	30.9	29.4	-9.6
27	261	1.2	1.2	0.2	117	1.8	-1.6	0.8	11	1.0	-0.2	-1.0	287	16.7	16.0	-4.8	275	50.7	50.5	-4.0	—	—	—	—	—	—	—	—
28	253	1.4	1.3	0.4	162	0.6	-0.2	0.6	298	1.5	1.3	-0.7	298	16.2	14.3	-7.7	281	33.0	32.4	-6.5	270	40.4	40.4	-0.1	262	14.2	14.1	2.0
29	264	1.9	1.9	0.2	292	0.5	0.5	-0.2	296	5.9	5.3	-2.6	297	21.7	19.3	-9.9	292	34.0	31.5	-12.9	278	43.3	42.9	-5.9	287	22.7	21.7	-6.5
30	225	1.7	1.2	1.2	186	0.9	0.1	0.9	283	4.0	3.9	-0.9	278	19.7	19.5	-2.8	283	26.0	25.4	-5.7	277	30.6	30.4	-3.5	272	25.5	25.5	-1.1
31	259	1.6	1.6	0.3	279	1.8	1.8	-0.3	281	6.6	6.5	-1.3	280	18.2	17.9	-3.1	264	37.7	37.5	3.7	265	29.8	29.7	2.4	340	3.2	1.1	-3.0

Daily Normals of Upper Air Winds (1971-2000)

SRINAGAR

JANUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	—	—	—	—	—	—	—	—	152	1.9	-0.9	1.7	247	8.8	8.1	3.4	265	27.3	27.2	2.3	259	37.8	37.1	7.4	—	—	—	—
2	—	—	—	—	—	—	—	—	144	1.9	-1.1	1.5	252	7.6	7.2	2.4	272	24.1	24.1	-0.9	270	36.4	36.4	0.0	315	9.1	6.4	-6.4
3	—	—	—	—	—	—	—	—	144	1.7	-1.0	1.4	229	6.2	4.7	4.1	264	20.5	20.4	2.2	260	31.4	31.0	5.3	295	21.0	19.0	-8.9
4	—	—	—	—	270	1.0	1.0	0.0	140	2.6	-1.7	2.0	234	7.5	6.1	4.4	274	24.2	24.1	-1.7	277	30.7	30.5	-3.6	—	—	—	—
5	—	—	—	—	—	—	—	—	148	1.9	-1.0	1.6	238	10.4	8.8	5.5	277	26.7	26.5	-3.3	279	35.5	35.1	-5.6	—	—	—	—
6	—	—	—	—	—	—	—	—	139	1.1	-0.7	0.8	253	6.6	6.3	1.9	253	20.3	19.4	5.9	265	25.9	25.8	2.1	—	—	—	—
7	—	—	—	—	—	—	—	—	149	1.7	-0.9	1.5	233	6.8	5.4	4.1	269	25.1	25.1	0.3	275	35.1	34.9	-3.3	270	47.0	47.0	0.0
8	—	—	—	—	—	—	—	—	135	1.6	-1.1	1.1	205	7.4	3.1	6.7	254	22.5	21.6	6.2	262	39.6	39.3	5.2	265	25.0	24.9	2.2
9	—	—	—	—	—	—	—	—	150	1.4	-0.7	1.2	238	5.2	4.4	2.8	278	21.2	21.0	-3.1	281	35.9	35.2	-6.8	292	23.0	21.3	-8.6
10	—	—	—	—	—	—	—	—	167	3.2	-0.7	3.1	232	10.0	7.9	6.2	266	25.8	25.8	1.6	279	33.0	32.6	-5.2	—	—	—	—
11	—	—	—	—	—	—	—	—	129	2.2	-1.7	1.4	214	5.0	2.8	4.1	270	18.9	18.9	0.1	289	25.8	24.4	-8.4	—	—	—	—
12	—	—	—	—	—	—	—	—	110	1.2	-1.1	0.4	220	4.3	2.8	3.3	276	23.9	23.8	-2.3	283	32.5	31.6	-7.5	—	—	—	—
13	—	—	—	—	—	—	—	—	141	3.8	-2.4	3.0	229	7.6	5.7	5.0	267	24.0	24.0	1.3	253	37.8	36.2	10.9	—	—	—	—
14	—	—	—	—	—	—	—	—	170	1.7	-0.3	1.7	215	9.0	5.2	7.4	262	23.8	23.6	3.4	265	42.7	42.5	4.0	—	—	—	—
15	—	—	—	—	—	—	—	—	147	3.3	-1.8	2.8	217	9.4	5.6	7.5	254	26.7	25.7	7.3	268	33.5	33.5	1.2	—	—	—	—
16	—	—	—	—	—	—	—	—	144	1.7	-1.0	1.4	248	10.9	10.1	4.0	272	28.0	28.0	-1.0	260	41.1	40.5	6.9	—	—	—	—
17	—	—	—	—	323	1.0	0.6	-0.8	166	1.6	-0.4	1.6	229	6.1	4.6	4.0	275	23.1	23.0	-2.2	271	29.0	29.0	-0.7	180	40.0	0.0	40.0
18	—	—	—	—	—	—	—	—	148	1.5	-0.8	1.3	245	8.9	8.1	3.7	271	29.0	29.0	-0.4	266	32.2	32.1	2.3	278	33.0	32.7	-4.6
19	—	—	—	—	—	—	—	—	150	2.2	-1.1	1.9	234	10.2	8.3	6.0	266	25.3	25.2	1.6	279	31.7	31.3	-4.7	248	39.0	36.2	14.6
20	—	—	—	—	—	—	—	—	115	1.4	-1.3	0.6	229	7.2	5.4	4.7	274	22.8	22.8	-1.4	277	27.8	27.6	-3.5	285	22.8	22.1	-5.8
21	—	—	—	—	—	—	—	—	150	2.0	-1.0	1.7	239	6.6	5.6	3.4	267	25.9	25.9	1.5	274	32.3	32.2	-2.5	—	—	—	—
22	—	—	—	—	—	—	—	—	144	3.2	-1.9	2.6	220	8.7	5.6	6.6	253	24.9	23.9	7.1	272	25.1	25.1	-0.9	—	—	—	—
23	—	—	—	—	—	—	—	—	137	2.2	-1.5	1.6	240	9.6	8.3	4.8	265	25.6	25.5	2.1	265	37.2	37.0	3.4	—	—	—	—
24	—	—	—	—	—	—	—	—	139	3.0	-2.0	2.3	221	10.3	6.8	7.7	263	27.8	27.6	3.4	276	38.5	38.3	-4.1	—	—	—	—
25	—	—	—	—	—	—	—	—	134	3.0	-2.2	2.1	224	12.0	8.3	8.6	258	27.8	27.2	5.9	254	36.2	34.9	9.8	—	—	—	—
26	—	—	—	—	—	—	—	—	150	3.6	-1.8	3.1	224	8.3	5.8	6.0	253	24.2	23.1	7.2	257	33.8	32.9	7.7	—	—	—	—
27	—	—	—	—	—	—	—	—	142	3.6	-2.2	2.8	215	9.3	5.4	7.6	257	25.1	24.5	5.5	256	36.8	35.8	8.7	—	—	—	—
28	—	—	—	—	—	—	—	—	145	2.8	-1.6	2.3	219	7.1	4.5	5.5	266	27.5	27.4	1.8	275	38.3	38.2	-3.2	—	—	—	—
29	—	—	—	—	—	—	—	—	164	2.5	-0.7	2.4	251	8.4	8.0	2.7	262	23.7	23.5	3.4	265	38.2	38.1	3.0	285	6.0	5.8	-1.6
30	—	—	—	—	—	—	—	—	133	2.1	-1.5	1.4	222	9.2	6.2	6.8	258	19.9	19.5	4.1	260	37.1	36.5	6.6	273	29.0	29.0	-1.5
31	—	—	—	—	—	—	—	—	143	2.6	-1.6	2.1	212	8.6	4.6	7.3	264	25.6	25.5	2.5	266	40.7	40.6	2.5	263	40.0	39.7	4.9

Daily Normals of Upper Air Winds (1971-2000)

SRINAGAR

FEBRUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	—	—	—	—	—	—	—	—	134	2.9	-2.1	2.0	237	6.9	5.8	3.7	276	24.7	24.6	-2.5	265	31.6	31.5	2.9	—	—	—	—			
2	—	—	—	—	—	—	—	—	147	2.4	-1.3	2.0	218	8.8	5.4	6.9	261	25.8	25.5	3.9	271	41.6	41.6	-0.8	—	—	—	—			
3	—	—	—	—	—	—	—	—	149	2.7	-1.4	2.3	218	7.3	4.5	5.7	250	21.5	20.2	7.3	256	36.9	35.8	9.1	—	—	—	—			
4	—	—	—	—	—	—	—	—	130	2.3	-1.8	1.5	230	5.9	4.5	3.8	263	24.8	24.6	2.9	274	38.4	38.3	-2.8	—	—	—	—			
5	—	—	—	—	—	—	—	—	160	1.5	-0.5	1.4	238	6.4	5.4	3.4	266	20.6	20.5	1.5	264	27.7	27.5	3.1	266	35.9	35.8	2.6			
6	—	—	—	—	—	—	—	—	145	3.2	-1.8	2.6	219	9.3	5.9	7.2	256	32.1	31.2	7.7	262	34.3	34.0	4.8	—	—	—	—			
7	—	—	—	—	—	—	—	—	143	2.0	-1.2	1.6	197	5.1	1.5	4.9	266	21.8	21.7	1.6	277	27.6	27.4	-3.3	—	—	—	—			
8	—	—	—	—	—	—	—	—	135	2.4	-1.7	1.7	248	5.6	5.2	2.1	276	25.9	25.7	-2.8	265	30.2	30.1	2.5	—	—	—	—			
9	—	—	—	—	—	—	—	—	135	1.8	-1.3	1.3	274	7.7	7.7	-0.5	282	22.7	22.2	-4.9	289	48.0	45.5	-15.4	295	31.0	28.1	-13.1			
10	—	—	—	—	—	—	—	—	143	1.0	-0.6	0.8	239	9.2	7.9	4.7	266	23.1	23.0	1.6	278	29.4	29.1	-4.3	270	24.0	24.0	-0.2			
11	—	—	—	—	—	—	—	—	135	2.7	-1.9	1.9	212	7.5	4.0	6.4	264	25.6	25.5	2.6	270	40.0	40.0	-0.1	—	—	—	—			
12	—	—	—	—	—	—	—	—	156	3.7	-1.5	3.4	239	10.6	9.1	5.5	257	28.9	28.1	6.6	261	44.7	44.2	6.8	—	—	—	—			
13	—	—	—	—	—	—	—	—	144	2.9	-1.7	2.3	224	7.8	5.4	5.6	257	21.9	21.4	4.8	256	34.3	33.3	8.1	250	22.3	20.9	7.8			
14	—	—	—	—	—	—	—	—	137	2.5	-1.7	1.8	213	8.7	4.8	7.3	247	23.9	21.9	9.5	246	36.3	33.2	14.6	—	—	—	—			
15	—	—	—	—	—	—	—	—	147	3.0	-1.6	2.5	222	7.3	4.9	5.4	257	20.9	20.3	4.8	261	33.4	33.0	5.4	—	—	—	—			
16	—	—	—	—	—	—	—	—	133	2.5	-1.8	1.7	198	8.8	2.7	8.4	242	19.5	17.3	9.1	256	28.7	27.9	6.7	256	21.0	20.4	5.1			
17	—	—	—	—	—	—	—	—	135	3.3	-2.3	2.3	207	5.6	2.6	5.0	250	21.4	20.1	7.3	259	38.4	37.6	7.6	290	25.0	23.5	-8.6			
18	—	—	—	—	—	—	—	—	139	2.3	-1.5	1.7	217	6.9	4.2	5.5	261	24.2	23.9	3.8	261	35.4	35.0	5.4	292	16.6	15.4	-6.2			
19	—	—	—	—	—	—	—	—	154	3.2	-1.4	2.9	239	7.1	6.1	3.6	255	21.5	20.8	5.4	272	30.1	30.1	-1.2	—	—	—	—			
20	—	—	—	—	—	—	—	—	153	1.3	-0.6	1.2	232	6.1	4.8	3.8	264	23.2	23.1	2.6	278	31.8	31.5	-4.6	—	—	—	—			
21	—	—	—	—	—	—	—	—	124	2.3	-1.9	1.3	233	9.9	7.9	5.9	257	24.6	24.0	5.5	285	33.6	32.4	-8.9	282	39.5	38.7	-8.0			
22	—	—	—	—	—	—	—	—	146	2.2	-1.2	1.8	239	7.8	6.7	4.0	268	26.4	26.4	0.7	272	34.8	34.8	-1.4	290	34.4	32.3	-11.9			
23	—	—	—	—	—	—	—	—	145	4.2	-2.4	3.4	232	8.6	6.8	5.3	264	25.9	25.8	2.7	274	40.2	40.1	-2.5	—	—	—	—			
24	—	—	—	—	—	—	—	—	149	2.6	-1.3	2.2	245	7.2	6.5	3.1	272	26.7	26.7	-1.0	279	36.2	35.8	-5.4	—	—	—	—			
25	—	—	—	—	—	—	—	—	135	2.1	-1.5	1.5	220	7.8	5.0	6.0	265	22.4	22.3	2.1	259	33.3	32.7	6.1	—	—	—	—			
26	—	—	—	—	—	—	—	—	147	3.5	-1.9	2.9	226	7.8	5.6	5.5	249	22.2	20.7	8.0	261	29.0	28.6	4.6	268	37.0	37.0	1.3			
27	—	—	—	—	—	—	—	—	128	2.4	-1.9	1.5	248	7.7	7.1	2.9	261	23.8	23.5	3.6	261	36.1	35.6	5.9	—	—	—	—			
28	—	—	—	—	—	—	—	—	135	2.5	-1.8	1.8	231	7.5	5.9	4.7	255	18.5	17.9	4.7	270	28.7	28.7	-0.2	268	35.0	35.0	1.2			
29	—	—	—	—	—	—	—	—	104	2.1	-2.0	0.5	229	8.5	6.4	5.6	257	23.4	22.8	5.3	273	32.7	32.7	-1.5	—	—	—	—			

Daily Normals of Upper Air Winds (1971-2000)

375

SRINAGAR

MARCH

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	—	—	—	—	—	—	—	—	141	2.7	-1.7	2.1	229	6.3	4.8	4.1	268	26.1	26.1	0.7	269	33.1	33.1	0.3	—	—	—	—			
2	—	—	—	—	—	—	—	—	133	2.2	-1.6	1.5	240	6.9	6.0	3.5	278	26.5	26.3	-3.6	282	36.6	35.8	-7.5	—	—	—	—			
3	—	—	—	—	—	—	—	—	139	2.9	-1.9	2.2	238	9.2	7.8	4.9	268	26.1	26.1	0.9	270	39.4	39.4	-0.3	353	9.0	1.1	-8.9			
4	—	—	—	—	—	—	—	—	151	2.6	-1.3	2.3	250	7.3	6.9	2.5	271	23.8	23.8	-0.5	270	37.3	37.3	-0.2	—	—	—	—			
5	—	—	—	—	—	—	—	—	148	4.7	-2.5	4.0	208	7.5	3.5	6.6	252	21.8	20.7	6.9	272	32.5	32.5	-1.4	282	39.0	38.1	-8.1			
6	—	—	—	—	—	—	—	—	133	2.6	-1.9	1.8	230	7.9	6.0	5.1	262	22.3	22.1	3.1	257	32.8	32.0	7.1	273	14.0	14.0	-0.7			
7	—	—	—	—	—	—	—	—	151	2.3	-1.1	2.0	236	7.1	5.9	4.0	268	30.0	30.0	1.0	271	42.4	42.4	-1.0	235	42.0	34.4	24.1			
8	—	—	—	—	—	—	—	—	140	4.2	-2.7	3.2	225	7.9	5.6	5.6	268	28.1	28.1	1.1	268	37.1	37.1	1.2	283	34.0	33.1	-7.6			
9	—	—	—	—	—	—	—	—	134	3.5	-2.5	2.4	226	9.5	6.8	6.6	264	26.0	25.9	2.6	261	32.1	31.7	5.3	282	36.0	35.2	-7.5			
10	—	—	—	—	—	—	—	—	150	3.4	-1.7	2.9	238	7.3	6.2	3.9	255	23.7	22.8	6.3	261	30.8	30.4	5.0	—	—	—	—			
11	—	—	—	—	—	—	—	—	153	2.8	-1.3	2.5	222	7.0	4.7	5.2	255	25.4	24.5	6.7	274	32.8	32.7	-2.3	—	—	—	—			
12	—	—	—	—	—	—	—	—	148	3.2	-1.7	2.7	250	6.6	6.2	2.3	273	24.6	24.6	-1.4	270	31.0	31.0	-0.2	257	35.0	34.1	7.9			
13	—	—	—	—	—	—	—	—	147	3.1	-1.7	2.6	244	8.8	7.9	3.9	273	24.4	24.4	-1.3	285	34.6	33.4	-9.2	—	—	—	—			
14	—	—	—	—	—	—	—	—	155	2.9	-1.2	2.6	240	9.2	8.0	4.6	275	25.9	25.8	-2.1	287	42.9	41.0	-12.5	—	—	—	—			
15	—	—	—	—	—	—	—	—	137	2.2	-1.5	1.6	244	6.8	6.1	3.0	275	25.7	25.6	-2.1	271	38.8	38.8	-1.0	285	33.0	31.9	-8.5			
16	—	—	—	—	—	—	—	—	145	3.2	-1.8	2.6	246	10.4	9.5	4.2	265	27.0	26.9	2.4	267	33.5	33.4	2.0	—	—	—	—			
17	—	—	—	—	—	—	—	—	142	2.3	-1.4	1.8	236	3.6	3.0	2.0	268	24.2	24.2	0.9	261	35.2	34.7	5.7	285	51.0	49.3	-13.2			
18	—	—	—	—	—	—	—	—	142	2.4	-1.5	1.9	233	5.9	4.7	3.6	264	25.7	25.5	2.8	266	37.0	36.9	2.6	—	—	—	—			
19	—	—	—	—	—	—	—	—	110	1.5	-1.4	0.5	228	5.7	4.2	3.8	272	21.6	21.6	-0.6	271	32.9	32.9	-0.5	262	47.5	47.0	6.6			
20	—	—	—	—	—	—	—	—	137	1.9	-1.3	1.4	231	9.0	7.0	5.6	270	19.4	19.4	0.1	274	29.3	29.2	-2.2	—	—	—	—			
21	—	—	—	—	—	—	—	—	117	1.6	-1.4	0.7	231	5.5	4.3	3.5	256	18.6	18.0	4.6	267	31.1	31.1	1.5	239	14.1	12.1	7.2			
22	—	—	—	—	—	—	—	—	127	3.4	-2.7	2.0	249	6.5	6.1	2.3	267	17.2	17.2	0.8	276	29.1	29.0	-2.9	256	21.6	21.0	5.1			
23	—	—	—	—	—	—	—	—	106	1.9	-1.8	0.5	216	6.1	3.6	4.9	256	17.9	17.4	4.4	259	28.5	27.9	5.6	263	20.0	19.9	2.4			
24	—	—	—	—	—	—	—	—	148	2.6	-1.4	2.2	229	5.6	4.2	3.7	257	18.2	17.7	4.1	283	21.9	21.3	-4.9	297	12.0	10.7	-5.4			
25	—	—	—	—	—	—	—	—	147	3.7	-2.0	3.1	246	5.6	5.1	2.3	265	18.5	18.4	1.6	290	21.6	20.3	-7.4	288	17.0	16.2	-5.3			
26	—	—	—	—	—	—	—	—	144	2.4	-1.4	1.9	246	7.1	6.5	2.9	270	23.5	23.5	0.0	278	29.2	28.9	-3.9	—	—	—	—			
27	—	—	—	—	—	—	—	—	135	1.3	-0.9	0.9	267	7.3	7.3	0.4	279	22.5	22.2	-3.6	284	35.0	33.9	-8.6	285	48.0	46.4	-12.4			
28	—	—	—	—	—	—	—	—	151	2.9	-1.4	2.5	234	7.7	6.2	4.5	255	23.0	22.2	6.1	268	34.4	34.4	1.1	290	26.0	24.4	-8.9			
29	—	—	—	—	—	—	—	—	144	3.6	-2.1	2.9	242	6.7	5.9	3.2	259	23.9	23.5	4.4	269	27.5	27.5	0.6	267	21.0	21.0	1.0			
30	—	—	—	—	—	—	—	—	135	3.1	-2.2	2.2	232	8.7	6.9	5.3	277	24.6	24.4	-2.9	286	33.6	32.4	-9.0	—	—	—	—			
31	—	—	—	—	—	—	—	—	128	2.8	-2.2	1.7	271	7.7	7.7	-0.2	274	22.4	22.3	-1.6	274	30.6	30.5	-2.1	—	—	—	—			

Daily Normals of Upper Air Winds (1971-2000)

SRINAGAR

APRIL

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	—	—	—	—	—	—	—	—	170	2.3	-0.4	2.3	253	6.8	6.5	2.0	272	22.8	22.8	-0.9	275	30.9	30.8	-2.9	302	35.0	29.7	-18.5			
2	—	—	—	—	—	—	—	—	136	3.2	-2.2	2.3	231	7.2	5.6	4.6	269	19.0	19.0	0.4	273	34.5	34.4	-2.1	265	16.0	15.9	1.4			
3	—	—	—	—	—	—	—	—	138	3.0	-2.0	2.2	229	7.8	5.9	5.1	259	18.5	18.2	3.5	272	33.4	33.4	-1.3	272	27.0	27.0	-0.9			
4	—	—	—	—	—	—	—	—	166	3.7	-0.9	3.6	231	5.8	4.5	3.6	256	20.1	19.5	4.7	264	24.0	23.9	2.4	241	18.3	16.0	8.8			
5	—	—	—	—	—	—	—	—	125	2.1	-1.7	1.2	254	5.8	5.6	1.6	282	21.0	20.6	-4.2	270	31.7	31.7	0.1	279	32.0	31.6	-5.0			
6	—	—	—	—	—	—	—	—	109	1.8	-1.7	0.6	251	5.7	5.4	1.9	275	21.7	21.6	-1.7	278	29.2	28.9	-3.9	283	15.0	14.6	-3.4			
7	—	—	—	—	—	—	—	—	161	1.8	-0.6	1.7	258	5.4	5.3	1.1	274	16.8	16.8	-1.2	285	26.9	26.0	-6.8	289	22.1	20.9	-7.2			
8	—	—	—	—	—	—	—	—	157	2.1	-0.8	1.9	217	5.8	3.5	4.6	269	20.2	20.2	0.5	278	33.8	33.4	-4.9	283	34.4	33.5	-8.0			
9	—	—	—	—	—	—	—	—	104	1.2	-1.2	0.3	277	5.7	5.7	-0.7	282	18.4	18.0	-3.8	288	30.2	28.7	-9.4	272	17.0	17.0	-0.6			
10	—	—	—	—	—	—	—	—	170	1.1	-0.2	1.1	253	5.9	5.6	1.7	288	19.8	18.8	-6.2	286	28.0	27.0	-7.5	296	35.3	31.6	-15.7			
11	—	—	—	—	—	—	—	—	165	2.4	-0.6	2.3	253	4.7	4.5	1.4	278	18.8	18.6	-2.7	277	30.1	29.9	-3.8	256	13.5	13.1	3.2			
12	—	—	—	—	—	—	—	—	143	1.0	-0.6	0.8	262	5.3	5.3	0.7	279	19.8	19.5	-3.2	280	29.2	28.7	-5.2	285	13.1	12.6	-3.4			
13	—	—	—	—	—	—	—	—	147	1.7	-0.9	1.4	247	4.9	4.5	1.9	273	17.4	17.4	-1.0	283	26.2	25.5	-5.9	285	29.3	28.2	-7.8			
14	—	—	—	—	—	—	—	—	147	1.7	-0.9	1.4	209	3.7	1.8	3.2	267	9.8	9.8	0.5	269	22.6	22.6	0.5	314	23.0	16.6	-15.9			
15	—	—	—	—	—	—	—	—	101	0.5	-0.5	0.1	232	4.4	3.5	2.7	283	16.1	15.7	-3.6	288	24.5	23.3	-7.6	325	6.0	3.4	-4.9			
16	—	—	—	—	—	—	—	—	360	0.5	0.0	-0.5	282	5.1	5.0	-1.1	279	16.8	16.6	-2.6	273	22.0	22.0	-1.1	245	17.0	15.4	7.2			
17	—	—	—	—	—	—	—	—	45	0.6	-0.4	-0.4	290	4.5	4.2	-1.5	285	12.8	12.4	-3.3	274	21.1	21.0	-1.5	309	20.8	16.2	-13.0			
18	—	—	—	—	—	—	—	—	198	0.9	0.3	0.9	245	4.2	3.8	1.8	270	14.4	14.4	0.1	268	26.7	26.7	0.9	249	21.8	20.4	7.7			
19	—	—	—	—	—	—	—	—	140	1.7	-1.1	1.3	273	3.9	3.9	-0.2	268	14.4	14.4	0.6	274	28.8	28.7	-1.9	268	34.4	34.4	1.4			
20	—	—	—	—	—	—	—	—	152	2.1	-1.0	1.9	265	4.8	4.8	0.4	279	15.9	15.7	-2.4	284	26.0	25.2	-6.2	281	8.9	8.7	-1.7			
21	—	—	—	—	—	—	—	—	118	2.4	-2.1	1.1	224	4.5	3.1	3.2	275	16.1	16.0	-1.4	276	29.7	29.5	-3.3	261	26.0	25.7	4.2			
22	—	—	—	—	—	—	—	—	162	0.6	-0.2	0.6	258	5.2	5.1	1.1	268	13.0	13.0	0.4	283	22.4	21.8	-5.0	—	—	—	—			
23	—	—	—	—	—	—	—	—	172	0.7	-0.1	0.7	265	5.0	5.0	0.4	284	10.7	10.4	-2.6	276	25.9	25.8	-2.6	294	34.0	31.1	-13.8			
24	—	—	—	—	—	—	—	—	207	0.4	0.2	0.4	287	5.2	5.0	-1.5	273	13.4	13.4	-0.7	279	20.4	20.1	-3.2	259	18.1	17.8	3.4			
25	—	—	—	—	—	—	—	—	270	0.6	0.6	0.0	287	3.0	2.9	-0.9	282	16.5	16.1	-3.5	282	29.6	28.9	-6.3	271	16.1	16.1	-0.3			
26	—	—	—	—	—	—	—	—	326	0.4	0.2	-0.3	250	5.0	4.7	1.7	278	14.4	14.2	-2.1	283	29.1	28.4	-6.3	270	14.4	14.4	0.1			
27	—	—	—	—	—	—	—	—	130	1.7	-1.3	1.1	254	5.5	5.3	1.5	273	14.5	14.5	-0.7	269	27.4	27.4	0.4	276	13.0	12.9	-1.4			
28	—	—	—	—	—	—	—	—	148	1.3	-0.7	1.1	234	6.3	5.1	3.7	266	14.8	14.8	1.1	264	22.4	22.3	2.2	259	23.7	23.3	4.5			
29	—	—	—	—	—	—	—	—	121	2.3	-2.0	1.2	246	6.0	5.5	2.4	268	20.4	20.4	0.7	267	25.3	25.3	1.4	237	37.9	31.8	20.7			
30	—	—	—	—	—	—	—	—	150	2.0	-1.0	1.7	224	5.9	4.1	4.2	271	18.9	18.9	-0.3	273	27.1	27.1	-1.4	253	11.3	10.8	3.3			

Daily Normals of Upper Air Winds (1971-2000)

SRINAGAR

MAY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	—	—	—	—	—	—	—	—	149	0.6	-0.3	0.5	197	4.8	1.4	4.6	247	15.7	14.4	6.2	261	22.5	22.2	3.6	280	10.5	10.3	-1.8			
2	—	—	—	—	—	—	—	—	180	0.9	0.0	0.9	197	4.1	1.2	3.9	247	17.2	15.8	6.8	253	23.9	22.8	7.0	281	15.1	14.8	-2.9			
3	—	—	—	—	—	—	—	—	180	0.4	0.0	0.4	253	1.7	1.6	0.5	257	11.1	10.8	2.5	269	28.3	28.3	0.5	250	23.6	22.2	7.9			
4	—	—	—	—	—	—	—	—	153	0.4	-0.2	0.4	253	3.7	3.5	1.1	275	12.9	12.9	-1.1	276	23.3	23.2	-2.5	236	13.2	10.9	7.4			
5	—	—	—	—	—	—	—	—	198	0.6	0.2	0.6	264	4.7	4.7	0.5	276	12.8	12.7	-1.4	281	24.4	23.9	-4.7	266	24.0	23.9	1.7			
6	—	—	—	—	—	—	—	—	252	0.6	0.6	0.2	252	4.0	3.8	1.2	274	14.1	14.1	-0.9	280	22.9	22.5	-4.1	281	18.9	18.6	-3.5			
7	—	—	—	—	—	—	—	—	225	0.3	0.2	0.2	293	4.1	3.8	-1.6	287	14.8	14.2	-4.3	281	24.8	24.4	-4.6	265	22.0	21.9	1.9			
8	—	—	—	—	—	—	—	—	186	1.0	0.1	1.0	285	4.3	4.2	-1.1	278	16.6	16.5	-2.2	280	25.4	25.0	-4.3	270	52.0	52.0	0.0			
9	—	—	—	—	—	—	—	—	169	1.5	-0.3	1.5	259	6.3	6.2	1.2	263	14.0	13.9	1.6	267	27.9	27.8	1.7	261	19.5	19.3	2.9			
10	—	—	—	—	—	—	—	—	246	1.0	0.9	0.4	279	7.4	7.3	-1.2	280	18.2	17.9	-3.2	277	26.2	26.0	-3.2	267	11.0	11.0	0.6			
11	—	—	—	—	—	—	—	—	291	0.9	0.8	-0.3	265	7.3	7.3	0.6	275	19.1	19.0	-1.8	274	34.5	34.4	-2.2	281	21.0	20.6	-4.0			
12	—	—	—	—	—	—	—	—	135	1.1	-0.8	0.8	262	6.6	6.5	0.9	282	16.3	16.0	-3.3	270	23.3	23.3	0.1	271	14.5	14.5	-0.3			
13	—	—	—	—	—	—	—	—	135	0.7	-0.5	0.5	267	5.9	5.9	0.3	259	15.2	14.9	2.9	283	27.1	26.5	-5.9	232	18.0	14.2	11.1			
14	—	—	—	—	—	—	—	—	360	1.1	0.0	-1.1	285	4.7	4.5	-1.2	288	16.6	15.8	-5.1	285	29.9	28.9	-7.5	253	28.6	27.4	8.3			
15	—	—	—	—	—	—	—	—	188	2.1	0.3	2.1	266	1.5	1.5	0.1	270	17.9	17.9	0.1	267	22.1	22.1	1.2	283	22.7	22.1	-5.3			
16	—	—	—	—	—	—	—	—	262	0.7	0.7	0.1	273	3.6	3.6	-0.2	268	18.9	18.9	0.7	263	25.9	25.7	3.0	272	33.5	33.5	-1.0			
17	—	—	—	—	—	—	—	—	277	1.7	1.7	-0.2	291	5.3	4.9	-1.9	286	20.3	19.5	-5.7	284	28.4	27.5	-7.0	—	—	—	—			
18	—	—	—	—	—	—	—	—	104	0.4	-0.4	0.1	273	4.5	4.5	-0.2	271	18.7	18.7	-0.3	271	30.3	30.3	-0.6	285	7.7	7.4	-2.0			
19	—	—	—	—	—	—	—	—	53	0.5	-0.4	-0.3	283	7.0	6.8	-1.6	283	22.1	21.5	-5.1	280	30.8	30.4	-5.2	230	13.5	10.4	8.6			
20	—	—	—	—	—	—	—	—	153	0.4	-0.2	0.4	271	4.6	4.6	-0.1	274	18.3	18.3	-1.2	270	26.9	26.9	-0.2	270	16.0	16.0	0.0			
21	—	—	—	—	—	—	—	—	160	1.5	-0.5	1.4	273	5.6	5.6	-0.3	287	15.7	15.0	-4.5	280	26.7	26.3	-4.7	267	28.0	28.0	1.5			
22	—	—	—	—	—	—	—	—	270	0.6	0.6	0.0	286	5.4	5.2	-1.5	285	12.4	12.0	-3.3	280	22.9	22.6	-3.8	279	18.8	18.6	-3.0			
23	—	—	—	—	—	—	—	—	298	1.7	1.5	-0.8	297	3.0	2.7	-1.4	296	19.1	17.1	-8.4	295	23.3	21.1	-9.8	262	14.0	13.9	1.9			
24	—	—	—	—	—	—	—	—	270	1.0	1.0	0.0	272	2.9	2.9	-0.1	285	14.4	13.9	-3.8	291	25.3	23.6	-9.0	289	6.7	6.3	-2.2			
25	—	—	—	—	—	—	—	—	—	—	—	—	275	5.0	5.0	-0.4	283	17.1	16.7	-3.9	282	23.9	23.4	-4.8	326	28.0	15.7	-23.2			
26	—	—	—	—	—	—	—	—	270	0.2	0.2	0.0	258	4.4	4.3	0.9	272	16.3	16.3	-0.7	272	25.9	25.9	-1.1	296	24.2	21.7	-10.6			
27	—	—	—	—	—	—	—	—	186	1.0	0.1	1.0	260	5.4	5.3	0.9	277	16.1	16.0	-2.0	283	27.0	26.3	-5.9	313	16.4	12.1	-11.1			
28	—	—	—	—	—	—	—	—	248	0.5	0.5	0.2	270	4.1	4.1	0.0	273	16.4	16.4	-1.0	269	23.6	23.6	0.6	264	23.5	23.4	2.4			
29	—	—	—	—	—	—	—	—	169	0.5	-0.1	0.5	284	4.5	4.4	-1.1	289	16.4	15.5	-5.3	272	22.5	22.5	-0.6	247	14.2	13.1	5.5			
30	—	—	—	—	—	—	—	—	270	0.4	0.4	0.0	260	4.7	4.6	0.8	279	13.6	13.4	-2.1	267	19.7	19.7	1.0	264	12.3	12.2	1.2			
31	—	—	—	—	—	—	—	—	158	1.1	-0.4	1.0	273	5.8	5.8	-0.3	274	16.4	16.4	-1.2	264	21.0	20.9	2.2	251	16.9	16.0	5.4			

Daily Normals of Upper Air Winds (1971-2000)

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SRINAGAR

JUNE

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	—	—	—	—	—	—	—	—	198	0.9	0.3	0.9	279	3.1	3.1	-0.5	272	19.2	19.2	-0.8	264	32.2	32.0	3.4	258	10.0	9.8	2.1			
2	—	—	—	—	—	—	—	—	275	1.1	1.1	-0.1	293	4.1	3.8	-1.6	290	19.6	18.5	-6.6	280	28.4	28.0	-4.7	261	21.2	21.0	3.2			
3	—	—	—	—	—	—	—	—	267	1.9	1.9	0.1	267	5.2	5.2	0.3	269	15.6	15.6	0.4	273	26.3	26.3	-1.6	270	14.5	14.5	0.1			
4	—	—	—	—	—	—	—	—	324	1.7	1.0	-1.4	270	5.1	5.1	0.0	278	18.7	18.5	-2.5	286	23.6	22.7	-6.3	314	13.9	10.0	-9.7			
5	—	—	—	—	—	—	—	—	360	0.8	0.0	-0.8	279	4.9	4.8	-0.8	285	19.0	18.4	-4.9	279	27.2	26.9	-4.1	268	17.7	17.7	0.5			
6	—	—	—	—	—	—	—	—	309	2.2	1.7	-1.4	294	5.6	5.1	-2.3	278	17.3	17.1	-2.5	272	27.4	27.4	-0.8	—	—	—	—			
7	—	—	—	—	—	—	—	—	274	1.4	1.4	-0.1	295	4.0	3.6	-1.7	281	17.2	16.9	-3.3	280	23.7	23.3	-4.2	289	12.7	12.0	-4.1			
8	—	—	—	—	—	—	—	—	325	1.6	0.9	-1.3	290	4.8	4.5	-1.6	276	17.2	17.1	-1.8	274	26.2	26.1	-2.0	—	—	—	—			
9	—	—	—	—	—	—	—	—	267	2.0	2.0	0.1	295	4.4	4.0	-1.9	273	17.9	17.9	-0.8	280	28.2	27.8	-4.9	—	—	—	—			
10	—	—	—	—	—	—	—	—	248	1.1	1.0	0.4	287	3.8	3.6	-1.1	270	16.7	16.7	0.1	269	22.6	22.6	0.3	293	24.0	22.1	-9.4			
11	—	—	—	—	—	—	—	—	198	0.3	0.1	0.3	293	6.1	5.6	-2.4	281	19.2	18.9	-3.6	278	23.5	23.3	-3.3	245	15.0	13.6	6.3			
12	—	—	—	—	—	—	—	—	304	2.3	1.9	-1.3	277	1.6	1.6	-0.2	270	16.6	16.6	0.1	282	28.0	27.4	-5.9	253	20.8	19.9	6.2			
13	—	—	—	—	—	—	—	—	288	2.5	2.4	-0.8	276	5.8	5.8	-0.6	274	17.4	17.4	-1.2	263	22.5	22.3	2.8	70	11.0	-10.3	-3.8			
14	—	—	—	—	—	—	—	—	265	2.1	2.1	0.2	284	4.9	4.8	-1.2	274	17.5	17.5	-1.3	273	27.9	27.9	-1.5	257	10.8	10.5	2.4			
15	—	—	—	—	—	—	—	—	297	2.0	1.8	-0.9	293	2.5	2.3	-1.0	270	19.6	19.6	0.1	272	19.7	19.7	-0.7	250	14.0	13.2	4.8			
16	—	—	—	—	—	—	—	—	313	1.8	1.3	-1.2	294	5.2	4.8	-2.1	281	20.9	20.5	-4.1	279	25.5	25.2	-3.9	245	15.0	13.6	6.3			
17	—	—	—	—	—	—	—	—	303	3.0	2.5	-1.6	295	4.7	4.3	-2.0	288	18.1	17.2	-5.7	288	22.3	21.2	-7.0	326	7.2	4.0	-6.0			
18	—	—	—	—	—	—	—	—	308	3.3	2.6	-2.0	296	5.1	4.6	-2.2	282	20.0	19.6	-4.0	281	27.2	26.7	-5.1	268	6.0	6.0	0.2			
19	—	—	—	—	—	—	—	—	321	1.9	1.2	-1.5	308	5.5	4.3	-3.4	278	15.7	15.6	-2.1	283	24.1	23.4	-5.6	262	48.0	47.5	6.7			
20	—	—	—	—	—	—	—	—	302	2.6	2.2	-1.4	315	4.1	2.9	-2.9	276	17.6	17.5	-1.7	285	20.7	20.0	-5.5	268	10.3	10.3	0.3			
21	—	—	—	—	—	—	—	—	306	1.7	1.4	-1.0	287	4.5	4.3	-1.3	277	15.6	15.5	-1.9	275	21.1	21.0	-2.0	307	3.5	2.8	-2.1			
22	—	—	—	—	—	—	—	—	304	2.3	1.9	-1.3	282	3.3	3.2	-0.7	276	13.4	13.3	-1.5	273	16.7	16.7	-0.8	248	10.0	9.2	3.8			
23	—	—	—	—	—	—	—	—	302	2.5	2.1	-1.3	301	3.1	2.7	-1.6	269	16.2	16.2	0.3	280	23.2	22.9	-4.0	37	5.9	-3.6	-4.7			
24	—	—	—	—	—	—	—	—	311	2.0	1.5	-1.3	335	3.8	1.6	-3.4	279	15.8	15.6	-2.4	272	20.3	20.3	-0.6	309	6.9	5.4	-4.3			
25	—	—	—	—	—	—	—	—	306	2.4	1.9	-1.4	315	2.7	1.9	-1.9	275	16.2	16.1	-1.5	285	20.9	20.2	-5.3	322	4.1	2.5	-3.2			
26	—	—	—	—	—	—	—	—	292	2.4	2.2	-0.9	288	4.1	3.9	-1.3	270	16.5	16.5	-0.1	268	20.5	20.5	0.6	333	4.2	1.9	-3.7			
27	—	—	—	—	—	—	—	—	297	2.5	2.2	-1.1	300	4.0	3.5	-2.0	286	16.1	15.5	-4.3	290	19.7	18.5	-6.7	33	2.0	-1.1	-1.7			
28	—	—	—	—	—	—	—	—	302	3.9	3.3	-2.1	321	5.4	3.4	-4.2	284	14.9	14.5	-3.5	279	15.1	14.9	-2.4	279	7.8	7.7	-1.2			
29	—	—	—	—	—	—	—	—	305	1.6	1.3	-0.9	308	4.7	3.7	-2.9	287	15.6	14.9	-4.6	276	16.9	16.8	-1.7	318	4.0	2.7	-3.0			
30	—	—	—	—	—	—	—	—	321	1.4	0.9	-1.1	282	4.7	4.6	-1.0	269	15.3	15.3	0.4	274	16.8	16.8	-1.1	267	7.0	7.0	0.4			

Daily Normals of Upper Air Winds (1971-2000)

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SRINAGAR

JULY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	—	—	—	—	—	—	—	—	353	0.8	0.1	-0.8	293	3.0	2.8	-1.2	270	18.9	18.9	0.1	280	20.3	20.0	-3.6	191	3.6	0.7	3.5			
2	—	—	—	—	—	—	—	—	305	2.1	1.7	-1.2	247	3.3	3.0	1.3	280	16.3	16.0	-2.9	285	15.6	15.0	-4.1	238	9.0	7.6	4.8			
3	—	—	—	—	—	—	—	—	309	1.3	1.0	-0.8	306	2.7	2.2	-1.6	279	14.2	14.0	-2.2	286	15.9	15.3	-4.3	19	4.6	-1.5	-4.3			
4	—	—	—	—	—	—	—	—	304	2.5	2.1	-1.4	293	2.8	2.6	-1.1	273	13.7	13.7	-0.7	268	16.4	16.4	0.6	62	2.6	-2.3	-1.2			
5	—	—	—	—	—	—	—	—	293	1.5	1.4	-0.6	315	3.5	2.5	-2.5	276	12.9	12.8	-1.3	263	17.5	17.4	2.2	279	3.1	3.1	-0.5			
6	—	—	—	—	—	—	—	—	299	1.3	1.1	-0.6	288	3.2	3.0	-1.0	288	14.6	13.9	-4.4	273	20.6	20.6	-0.9	38	4.1	-2.5	-3.2			
7	—	—	—	—	—	—	—	—	311	2.1	1.6	-1.4	330	3.8	1.9	-3.3	293	14.7	13.5	-5.8	284	15.8	15.3	-3.8	245	9.1	8.3	3.8			
8	—	—	—	—	—	—	—	—	326	1.8	1.0	-1.5	312	1.3	1.0	-0.9	269	12.4	12.4	0.3	267	15.8	15.8	0.8	248	3.5	3.2	1.3			
9	—	—	—	—	—	—	—	—	281	1.5	1.5	-0.3	324	2.4	1.4	-1.9	278	12.2	12.1	-1.8	273	7.0	7.0	-0.4	111	6.1	-5.7	2.2			
10	—	—	—	—	—	—	—	—	270	0.1	0.1	0.0	310	2.6	2.0	-1.7	270	10.0	10.0	0.0	283	11.7	11.4	-2.7	214	6.8	3.8	5.6			
11	—	—	—	—	—	—	—	—	304	0.7	0.6	-0.4	326	0.4	0.2	-0.3	267	10.2	10.2	0.6	263	13.1	13.0	1.5	49	2.3	-1.7	-1.5			
12	—	—	—	—	—	—	—	—	276	0.9	0.9	-0.1	337	1.5	0.6	-1.4	272	11.7	11.7	-0.4	268	11.0	11.0	0.3	49	2.0	-1.5	-1.3			
13	—	—	—	—	—	—	—	—	360	0.1	0.0	-0.1	274	1.4	1.4	-0.1	259	8.6	8.4	1.7	249	12.5	11.7	4.5	135	0.1	-0.1	0.1			
14	—	—	—	—	—	—	—	—	325	1.6	0.9	-1.3	261	1.9	1.9	0.3	272	10.0	10.0	-0.4	262	14.4	14.2	2.1	4	6.6	-0.5	-6.6			
15	—	—	—	—	—	—	—	—	300	0.8	0.7	-0.4	270	0.1	0.1	0.0	263	10.4	10.3	1.2	263	17.0	16.9	2.0	329	7.4	3.8	-6.3			
16	—	—	—	—	—	—	—	—	277	0.8	0.8	-0.1	275	1.1	1.1	-0.1	257	11.2	10.9	2.5	267	15.3	15.3	0.7	69	4.4	-4.1	-1.6			
17	—	—	—	—	—	—	—	—	306	0.9	0.7	-0.5	293	2.5	2.3	-1.0	263	11.8	11.7	1.4	261	16.1	15.9	2.6	274	12.0	12.0	-0.8			
18	—	—	—	—	—	—	—	—	325	1.6	0.9	-1.3	297	0.9	0.8	-0.4	266	11.0	11.0	0.7	265	15.0	14.9	1.3	271	8.4	8.4	-0.2			
19	—	—	—	—	—	—	—	—	325	1.9	1.1	-1.6	282	2.4	2.3	-0.5	275	11.5	11.5	-1.0	266	17.3	17.3	1.2	325	6.5	3.7	-5.3			
20	—	—	—	—	—	—	—	—	360	0.9	0.0	-0.9	330	3.0	1.5	-2.6	273	12.5	12.5	-0.6	270	15.6	15.6	0.1	222	4.6	3.1	3.4			
21	—	—	—	—	—	—	—	—	18	0.3	-0.1	-0.3	223	1.6	1.1	1.2	244	10.4	9.4	4.5	255	14.7	14.2	3.7	133	7.2	-5.3	4.9			
22	—	—	—	—	—	—	—	—	349	1.0	0.2	-1.0	270	0.5	0.5	0.0	261	10.4	10.3	1.6	245	14.7	13.3	6.3	222	4.2	2.8	3.1			
23	—	—	—	—	—	—	—	—	11	0.5	-0.1	-0.5	272	2.4	2.4	-0.1	259	10.4	10.2	1.9	250	12.8	12.1	4.3	37	4.5	-2.7	-3.6			
24	—	—	—	—	—	—	—	—	344	0.7	0.2	-0.7	280	2.8	2.8	-0.5	257	11.9	11.6	2.6	261	17.8	17.6	2.7	225	0.3	0.2	0.2			
25	—	—	—	—	—	—	—	—	310	1.7	1.3	-1.1	292	2.2	2.0	-0.8	278	10.2	10.1	-1.5	259	15.9	15.6	3.0	188	5.2	0.7	5.2			
26	—	—	—	—	—	—	—	—	311	1.1	0.8	-0.7	272	3.1	3.1	-0.1	266	11.7	11.7	0.9	262	14.6	14.4	2.1	54	1.4	-1.1	-0.8			
27	—	—	—	—	—	—	—	—	305	1.2	1.0	-0.7	302	1.9	1.6	-1.0	271	10.7	10.7	-0.1	278	14.3	14.2	-2.0	321	13.9	8.8	-10.8			
28	—	—	—	—	—	—	—	—	310	2.3	1.8	-1.5	300	2.4	2.1	-1.2	287	7.3	7.0	-2.1	258	7.8	7.6	1.6	239	3.7	3.2	1.9			
29	—	—	—	—	—	—	—	—	331	2.1	1.0	-1.8	291	2.2	2.1	-0.8	268	6.0	6.0	0.2	267	10.8	10.8	0.6	181	5.5	0.1	5.5			
30	—	—	—	—	—	—	—	—	98	0.7	-0.7	0.1	263	2.4	2.4	0.3	265	9.8	9.8	0.9	261	12.7	12.5	2.0	86	1.3	-1.3	-0.1			
31	—	—	—	—	—	—	—	—	345	1.1	0.3	-1.1	248	1.6	1.5	0.6	244	7.1	6.4	3.1	248	10.8	10.0	4.0	31	5.6	-2.9	-4.8			

Daily Normals of Upper Air Winds (1971-2000)

380

SRINAGAR

AUGUST

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	—	—	—	—	—	—	—	—	337	0.8	0.3	-0.7	278	0.7	0.7	-0.1	272	9.9	9.9	-0.4	253	10.7	10.2	3.1	27	5.7	-2.6	-5.1			
2	—	—	—	—	—	—	—	—	325	2.1	1.2	-1.7	243	2.0	1.8	0.9	246	7.8	7.1	3.2	260	8.3	8.2	1.4	138	2.7	-1.8	2.0			
3	—	—	—	—	—	—	—	—	309	1.4	1.1	-0.9	261	1.3	1.3	0.2	259	7.3	7.2	1.4	254	10.1	9.7	2.8	332	1.7	0.8	-1.5			
4	—	—	—	—	—	—	—	—	284	0.8	0.8	-0.2	286	1.9	1.8	-0.5	256	10.2	9.9	2.4	258	13.0	12.7	2.8	155	5.0	-2.1	4.5			
5	—	—	—	—	—	—	—	—	301	0.6	0.5	-0.3	247	2.3	2.1	0.9	259	10.3	10.1	1.9	262	12.1	12.0	1.7	80	3.6	-3.5	-0.6			
6	—	—	—	—	—	—	—	—	342	0.6	0.2	-0.6	191	1.5	0.3	1.5	248	8.4	7.8	3.1	259	10.9	10.7	2.1	149	9.1	-4.7	7.8			
7	—	—	—	—	—	—	—	—	5	1.1	-0.1	-1.1	260	2.3	2.3	0.4	257	9.1	8.9	2.0	244	14.6	13.1	6.4	172	10.3	-1.4	10.2			
8	—	—	—	—	—	—	—	—	315	0.1	0.1	-0.1	266	2.8	2.8	0.2	253	10.0	9.6	2.9	255	13.4	12.9	3.5	183	6.7	0.3	6.7			
9	—	—	—	—	—	—	—	—	270	0.3	0.3	0.0	234	3.4	2.8	2.0	254	11.1	10.7	3.1	252	16.2	15.4	4.9	357	4.1	0.2	-4.1			
10	—	—	—	—	—	—	—	—	323	1.5	0.9	-1.2	220	1.6	1.0	1.2	271	10.0	10.0	-0.1	269	10.2	10.2	0.1	74	4.4	-4.2	-1.2			
11	—	—	—	—	—	—	—	—	321	1.4	0.9	-1.1	281	2.6	2.6	-0.5	255	9.0	8.7	2.3	252	13.9	13.3	4.2	87	2.0	-2.0	-0.1			
12	—	—	—	—	—	—	—	—	306	1.4	1.1	-0.8	291	2.6	2.4	-0.9	268	9.9	9.9	0.3	260	15.7	15.5	2.6	241	10.7	9.3	5.2			
13	—	—	—	—	—	—	—	—	318	1.2	0.8	-0.9	267	2.0	2.0	0.1	278	9.5	9.4	-1.4	266	12.5	12.5	0.9	232	3.6	2.8	2.2			
14	—	—	—	—	—	—	—	—	315	1.3	0.9	-0.9	268	2.5	2.5	0.1	267	12.4	12.4	0.6	254	13.6	13.1	3.7	353	2.6	0.3	-2.6			
15	—	—	—	—	—	—	—	—	324	1.7	1.0	-1.4	261	1.9	1.9	0.3	254	10.0	9.6	2.7	266	16.2	16.2	1.0	350	4.0	0.7	-3.9			
16	—	—	—	—	—	—	—	—	354	1.0	0.1	-1.0	270	1.8	1.8	0.0	257	11.5	11.2	2.6	256	13.0	12.6	3.1	267	21.3	21.3	1.0			
17	—	—	—	—	—	—	—	—	299	1.8	1.6	-0.9	246	1.2	1.1	0.5	275	10.0	10.0	-0.8	274	9.9	9.9	-0.7	295	25.1	22.7	-10.6			
18	—	—	—	—	—	—	—	—	333	1.1	0.5	-1.0	270	1.8	1.8	0.0	268	8.0	8.0	0.3	275	10.7	10.7	-0.9	358	2.9	0.1	-2.9			
19	—	—	—	—	—	—	—	—	297	1.1	1.0	-0.5	321	0.6	0.4	-0.5	261	8.4	8.3	1.3	257	13.4	13.1	3.0	279	2.5	2.5	-0.4			
20	—	—	—	—	—	—	—	—	324	1.7	1.0	-1.4	253	2.1	2.0	0.6	261	13.1	12.9	2.0	261	16.9	16.7	2.5	237	11.2	9.4	6.1			
21	—	—	—	—	—	—	—	—	305	1.6	1.3	-0.9	274	3.2	3.2	-0.2	281	12.8	12.6	-2.5	276	17.8	17.7	-1.8	247	10.9	10.0	4.3			
22	—	—	—	—	—	—	—	—	299	1.3	1.1	-0.6	257	2.7	2.6	0.6	275	12.7	12.7	-1.0	270	18.0	18.0	-0.1	278	7.5	7.4	-1.1			
23	—	—	—	—	—	—	—	—	317	1.6	1.1	-1.2	283	3.6	3.5	-0.8	274	13.1	13.1	-0.9	277	18.4	18.3	-2.2	277	19.3	19.2	-2.3			
24	—	—	—	—	—	—	—	—	294	1.2	1.1	-0.5	285	3.0	2.9	-0.8	259	11.9	11.7	2.2	266	15.0	15.0	1.1	215	6.0	3.4	4.9			
25	—	—	—	—	—	—	—	—	355	1.2	0.1	-1.2	230	3.1	2.4	2.0	272	15.0	15.0	-0.4	258	19.5	19.1	4.0	268	9.0	9.0	0.3			
26	—	—	—	—	—	—	—	—	45	0.3	-0.2	-0.2	244	2.5	2.3	1.1	264	15.4	15.3	1.6	258	20.2	19.8	4.2	289	7.0	6.6	-2.3			
27	—	—	—	—	—	—	—	—	318	1.3	0.9	-1.0	232	3.9	3.1	2.4	257	16.6	16.2	3.8	254	18.0	17.3	4.8	265	12.1	12.1	1.1			
28	—	—	—	—	—	—	—	—	329	1.2	0.6	-1.0	240	2.0	1.7	1.0	254	15.6	15.0	4.3	249	22.6	21.1	8.1	276	11.0	10.9	-1.1			
29	—	—	—	—	—	—	—	—	304	0.4	0.3	-0.2	223	1.6	1.1	1.2	252	10.5	10.0	3.2	248	15.4	14.3	5.7	240	9.7	8.4	4.9			
30	—	—	—	—	—	—	—	—	287	1.0	1.0	-0.3	248	3.5	3.2	1.3	254	17.3	16.6	4.9	258	25.9	25.3	5.6	264	25.7	25.6	2.6			
31	—	—	—	—	—	—	—	—	360	0.3	0.0	-0.3	266	4.7	4.7	0.3	256	16.4	15.9	4.0	254	22.1	21.2	6.2	155	11.0	-4.6	10.0			

Daily Normals of Upper Air Winds (1971-2000)

SRINAGAR

SEPTEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	—	—	—	—	—	—	—	—	293	0.8	0.7	-0.3	292	3.1	2.9	-1.2	264	15.5	15.4	1.7	267	22.0	22.0	1.1	266	21.1	21.1	1.4			
2	—	—	—	—	—	—	—	—	302	1.5	1.3	-0.8	257	1.8	1.8	0.4	264	16.7	16.6	1.6	272	21.6	21.6	-0.8	—	—	—	—			
3	—	—	—	—	—	—	—	—	315	0.6	0.4	-0.4	259	2.5	2.5	0.5	268	15.3	15.3	0.6	268	19.3	19.3	0.6	284	37.0	35.9	-9.0			
4	—	—	—	—	—	—	—	—	330	1.6	0.8	-1.4	267	2.0	2.0	0.1	262	16.8	16.7	2.2	255	21.1	20.4	5.3	—	—	—	—			
5	—	—	—	—	—	—	—	—	313	1.6	1.2	-1.1	274	2.7	2.7	-0.2	257	17.0	16.6	3.7	270	24.4	24.4	0.2	277	9.0	8.9	-1.1			
6	—	—	—	—	—	—	—	—	313	1.8	1.3	-1.2	260	3.4	3.3	0.6	266	15.6	15.6	1.2	262	20.2	20.0	2.8	258	16.6	16.2	3.4			
7	—	—	—	—	—	—	—	—	300	0.8	0.7	-0.4	274	2.9	2.9	-0.2	258	16.3	16.0	3.3	266	21.4	21.3	1.6	265	11.7	11.6	1.1			
8	—	—	—	—	—	—	—	—	305	2.1	1.7	-1.2	235	3.2	2.6	1.8	251	19.8	18.7	6.6	250	29.0	27.3	9.8	251	14.0	13.2	4.6			
9	—	—	—	—	—	—	—	—	172	0.7	-0.1	0.7	264	2.8	2.8	0.3	261	18.1	17.9	2.7	259	21.8	21.4	4.0	281	8.0	7.9	-1.5			
10	—	—	—	—	—	—	—	—	310	1.6	1.2	-1.0	272	3.6	3.6	-0.1	259	20.5	20.1	4.0	258	25.5	24.9	5.4	257	15.0	14.6	3.5			
11	—	—	—	—	—	—	—	—	313	1.6	1.2	-1.1	258	3.8	3.7	0.8	270	18.3	18.3	0.0	269	25.8	25.8	0.6	265	68.0	67.7	5.9			
12	—	—	—	—	—	—	—	—	303	1.7	1.4	-0.9	276	4.5	4.5	-0.5	271	18.2	18.2	-0.3	275	24.0	23.9	-2.0	289	20.8	19.7	-6.6			
13	—	—	—	—	—	—	—	—	308	1.1	0.9	-0.7	256	2.9	2.8	0.7	268	17.3	17.3	0.6	268	19.9	19.9	0.8	—	—	—	—			
14	—	—	—	—	—	—	—	—	306	2.2	1.8	-1.3	309	1.3	1.0	-0.8	266	17.9	17.9	1.1	270	18.3	18.3	0.1	50	5.0	-3.8	-3.2			
15	—	—	—	—	—	—	—	—	270	0.1	0.1	0.0	264	2.7	2.7	0.3	267	16.4	16.4	0.9	269	25.5	25.5	0.4	269	9.0	9.0	0.2			
16	—	—	—	—	—	—	—	—	309	1.3	1.0	-0.8	278	2.9	2.9	-0.4	268	16.1	16.1	0.5	273	19.2	19.2	-1.1	290	4.7	4.4	-1.6			
17	—	—	—	—	—	—	—	—	336	1.0	0.4	-0.9	285	3.1	3.0	-0.8	273	17.5	17.5	-0.9	274	24.4	24.3	-1.8	—	—	—	—			
18	—	—	—	—	—	—	—	—	303	2.0	1.7	-1.1	265	2.2	2.2	0.2	271	17.6	17.6	-0.3	265	22.0	21.9	1.9	278	10.5	10.4	-1.5			
19	—	—	—	—	—	—	—	—	333	0.7	0.3	-0.6	229	2.1	1.6	1.4	261	15.0	14.8	2.3	261	18.7	18.5	3.0	225	6.9	4.9	4.9			
20	—	—	—	—	—	—	—	—	290	1.2	1.1	-0.4	254	1.5	1.4	0.4	263	16.0	15.9	2.0	261	20.5	20.2	3.3	265	34.9	34.8	3.0			
21	—	—	—	—	—	—	—	—	294	1.2	1.1	-0.5	223	2.6	1.8	1.9	257	15.7	15.3	3.5	257	22.2	21.6	5.1	279	12.9	12.7	-2.0			
22	—	—	—	—	—	—	—	—	326	0.7	0.4	-0.6	227	3.4	2.5	2.3	251	18.9	17.8	6.3	255	24.8	24.0	6.4	265	16.0	15.9	1.3			
23	—	—	—	—	—	—	—	—	301	1.2	1.0	-0.6	248	2.4	2.2	0.9	252	15.1	14.3	4.7	259	29.1	28.6	5.4	263	19.9	19.8	2.3			
24	—	—	—	—	—	—	—	—	302	1.3	1.1	-0.7	261	5.5	5.4	0.9	263	21.2	21.0	2.6	254	32.4	31.2	8.9	316	11.0	7.6	-7.9			
25	—	—	—	—	—	—	—	—	285	1.1	1.1	-0.3	284	3.4	3.3	-0.8	273	18.5	18.5	-1.1	265	22.4	22.3	2.1	248	5.5	5.1	2.1			
26	—	—	—	—	—	—	—	—	308	1.1	0.9	-0.7	267	3.6	3.6	0.2	265	17.7	17.6	1.6	265	23.7	23.6	2.2	—	—	—	—			
27	—	—	—	—	—	—	—	—	304	0.7	0.6	-0.4	263	3.8	3.8	0.5	266	17.4	17.4	1.2	271	29.2	29.2	-0.7	265	18.0	17.9	1.6			
28	—	—	—	—	—	—	—	—	146	0.4	-0.2	0.3	262	3.5	3.5	0.5	262	18.6	18.4	2.5	266	28.1	28.0	2.2	280	16.3	16.0	-2.9			
29	—	—	—	—	—	—	—	—	282	1.4	1.4	-0.3	276	2.9	2.9	-0.3	271	20.2	20.2	-0.4	259	33.4	32.8	6.1	291	11.0	10.3	-3.9			
30	—	—	—	—	—	—	—	—	307	0.5	0.4	-0.3	258	4.8	4.7	1.0	273	21.9	21.9	-1.1	276	31.7	31.5	-3.2	—	—	—	—			

Daily Normals of Upper Air Winds (1971-2000)

SRINAGAR

OCTOBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	—	—	—	—	—	—	—	—	207	0.4	0.2	0.4	234	3.9	3.2	2.3	263	20.2	20.1	2.3	257	27.7	27.0	6.2	268	10.0	10.0	0.3			
2	—	—	—	—	—	—	—	—	305	1.2	1.0	-0.7	270	2.6	2.6	0.0	272	19.0	19.0	-0.6	264	26.7	26.5	3.0	—	—	—	—			
3	—	—	—	—	—	—	—	—	288	0.9	0.9	-0.3	231	4.0	3.1	2.5	261	18.7	18.5	2.8	279	21.5	21.3	-3.2	—	—	—	—			
4	—	—	—	—	—	—	—	—	180	0.4	0.0	0.4	237	3.5	2.9	1.9	280	19.7	19.4	-3.5	259	31.1	30.6	5.8	273	11.0	11.0	-0.6			
5	—	—	—	—	—	—	—	—	318	1.2	0.8	-0.9	249	4.0	3.7	1.4	272	18.4	18.4	-0.8	282	29.5	28.8	-6.2	—	—	—	—			
6	—	—	—	—	—	—	—	—	342	0.3	0.1	-0.3	258	3.0	2.9	0.6	265	16.9	16.8	1.5	269	26.9	26.9	0.5	—	—	—	—			
7	—	—	—	—	—	—	—	—	231	0.6	0.5	0.4	255	4.3	4.2	1.1	259	20.1	19.7	4.0	270	24.1	24.1	-0.1	245	23.0	20.8	9.7			
8	—	—	—	—	—	—	—	—	198	0.6	0.2	0.6	241	3.9	3.4	1.9	266	23.7	23.6	1.6	278	32.0	31.7	-4.2	—	—	—	—			
9	—	—	—	—	—	—	—	—	189	0.6	0.1	0.6	251	3.4	3.2	1.1	269	20.5	20.5	0.5	268	31.4	31.4	1.2	286	50.0	48.1	-13.8			
10	—	—	—	—	—	—	—	—	198	0.3	0.1	0.3	260	4.6	4.5	0.8	273	19.8	19.8	-1.0	264	31.8	31.6	3.5	—	—	—	—			
11	—	—	—	—	—	—	—	—	145	1.2	-0.7	1.0	256	4.4	4.3	1.1	269	21.6	21.6	0.5	268	30.0	30.0	1.2	—	—	—	—			
12	—	—	—	—	—	—	—	—	280	1.1	1.1	-0.2	233	3.4	2.7	2.0	258	20.3	19.9	4.1	267	30.8	30.8	1.7	270	20.0	20.0	0.0			
13	—	—	—	—	—	—	—	—	245	1.4	1.3	0.6	255	3.4	3.3	0.9	274	21.7	21.7	-1.4	281	31.0	30.4	-6.0	—	—	—	—			
14	—	—	—	—	—	—	—	—	248	0.5	0.5	0.2	240	4.8	4.1	2.4	262	21.8	21.6	3.1	276	28.1	27.9	-3.0	—	—	—	—			
15	—	—	—	—	—	—	—	—	170	1.1	-0.2	1.1	266	5.1	5.1	0.4	269	22.0	22.0	0.5	277	29.7	29.5	-3.8	256	51.0	49.5	12.2			
16	—	—	—	—	—	—	—	—	153	0.4	-0.2	0.4	240	5.1	4.4	2.5	258	20.4	20.0	4.1	264	30.9	30.7	3.2	—	—	—	—			
17	—	—	—	—	—	—	—	—	99	1.8	-1.8	0.3	250	4.9	4.6	1.7	267	22.6	22.6	1.1	273	30.7	30.6	-1.8	—	—	—	—			
18	—	—	—	—	—	—	—	—	157	2.1	-0.8	1.9	245	3.8	3.4	1.6	271	20.6	20.6	-0.4	269	33.2	33.2	0.4	238	40.0	33.9	21.2			
19	—	—	—	—	—	—	—	—	126	0.9	-0.7	0.5	263	3.2	3.2	0.4	279	20.6	20.4	-3.2	280	25.6	25.2	-4.6	—	—	—	—			
20	—	—	—	—	—	—	—	—	151	1.0	-0.5	0.9	274	5.3	5.3	-0.4	270	22.1	22.1	-0.1	276	32.7	32.5	-3.4	—	—	—	—			
21	—	—	—	—	325	5.0	2.9	-4.1	135	1.1	-0.8	0.8	279	4.5	4.4	-0.7	278	18.1	17.9	-2.6	282	30.3	29.6	-6.4	—	—	—	—			
22	—	—	—	—	—	—	—	—	360	0.5	0.0	-0.5	250	4.6	4.3	1.6	268	18.5	18.5	0.8	268	30.3	30.3	1.0	—	—	—	—			
23	—	—	—	—	—	—	—	—	288	0.6	0.6	-0.2	261	4.6	4.5	0.7	258	22.2	21.7	4.8	260	35.1	34.5	6.2	—	—	—	—			
24	—	—	—	—	—	—	—	—	148	1.3	-0.7	1.1	241	5.6	4.9	2.7	274	22.8	22.8	-1.5	265	31.8	31.7	3.0	—	—	—	—			
25	—	—	—	—	—	—	—	—	297	0.4	0.4	-0.2	286	2.2	2.1	-0.6	279	19.2	18.9	-3.1	270	29.3	29.3	0.0	288	22.4	21.3	-6.9			
26	—	—	—	—	—	—	—	—	309	0.6	0.5	-0.4	230	2.3	1.8	1.5	267	15.2	15.2	0.9	265	27.3	27.2	2.5	—	—	—	—			
27	—	—	—	—	—	—	—	—	297	0.2	0.2	-0.1	275	3.2	3.2	-0.3	285	14.8	14.3	-3.9	281	23.6	23.2	-4.3	330	15.0	7.5	-13.0			
28	—	—	—	—	—	—	—	—	191	0.5	0.1	0.5	218	2.3	1.4	1.8	283	19.8	19.3	-4.4	285	27.0	26.0	-7.1	—	—	—	—			
29	—	—	—	—	—	—	—	—	153	0.2	-0.1	0.2	255	4.2	4.1	1.1	274	20.1	20.1	-1.3	275	30.6	30.5	-2.8	—	—	—	—			
30	—	—	—	—	—	—	—	—	333	0.2	0.1	-0.2	250	4.8	4.5	1.6	265	18.9	18.8	1.8	266	24.5	24.4	1.9	272	7.0	7.0	-0.2			
31	—	—	—	—	—	—	—	—	297	0.7	0.6	-0.3	254	3.6	3.5	1.0	277	19.3	19.1	-2.4	275	29.5	29.4	-2.7	281	20.5	20.1	-3.9			

Daily Normals of Upper Air Winds (1971-2000)

SRINAGAR

NOVEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	—	—	—	—	—	—	—	—	321	0.6	0.4	-0.5	249	4.9	4.6	1.8	283	18.3	17.8	-4.1	269	27.3	27.3	0.3	—	—	—	—
2	—	—	—	—	—	—	—	—	158	1.1	-0.4	1.0	254	3.2	3.1	0.9	275	21.5	21.4	-1.7	271	28.6	28.6	-0.7	—	—	—	—
3	—	—	—	—	—	—	—	—	360	0.7	0.0	-0.7	250	3.8	3.6	1.3	266	17.6	17.6	1.3	278	25.3	25.0	-3.7	262	21.8	21.6	3.0
4	—	—	—	—	127	1.0	-0.8	0.6	132	1.2	-0.9	0.8	254	3.6	3.5	1.0	274	20.1	20.0	-1.5	274	32.3	32.2	-2.2	295	18.0	16.3	-7.6
5	—	—	—	—	—	—	—	—	166	0.4	-0.1	0.4	276	5.9	5.9	-0.6	282	22.9	22.4	-4.6	277	27.1	26.9	-3.5	268	17.8	17.8	0.7
6	—	—	—	—	—	—	—	—	141	0.6	-0.4	0.5	265	4.5	4.5	0.4	280	21.3	21.0	-3.8	283	31.5	30.7	-7.2	—	—	—	—
7	—	—	—	—	—	—	—	—	149	1.7	-0.9	1.5	249	7.5	7.0	2.7	262	23.0	22.8	3.3	254	29.0	27.9	7.9	—	—	—	—
8	—	—	—	—	—	—	—	—	163	1.0	-0.3	1.0	254	5.5	5.3	1.5	271	23.4	23.4	-0.3	271	32.4	32.4	-0.8	—	—	—	—
9	—	—	—	—	—	—	—	—	148	1.9	-1.0	1.6	249	5.6	5.2	2.0	273	23.4	23.4	-1.4	275	30.9	30.8	-2.8	—	—	—	—
10	—	—	—	—	—	—	—	—	135	1.0	-0.7	0.7	258	7.3	7.1	1.5	267	22.8	22.8	1.0	283	24.4	23.8	-5.4	285	28.9	27.9	-7.6
11	—	—	—	—	—	—	—	—	138	1.5	-1.0	1.1	244	6.9	6.2	3.0	272	22.7	22.7	-0.7	278	38.0	37.6	-5.4	293	27.0	24.9	-10.5
12	—	—	—	—	—	—	—	—	145	1.2	-0.7	1.0	270	4.6	4.6	0.0	281	23.4	23.0	-4.4	287	33.3	31.9	-9.7	295	32.4	29.5	-13.5
13	—	—	—	—	—	—	—	—	152	1.7	-0.8	1.5	255	7.4	7.2	1.9	271	27.1	27.1	-0.3	280	35.4	34.9	-5.9	290	15.3	14.4	-5.2
14	—	—	—	—	—	—	—	—	131	1.8	-1.4	1.2	248	6.8	6.3	2.5	274	26.4	26.3	-2.0	281	28.9	28.4	-5.3	268	22.7	22.7	0.6
15	—	—	—	—	—	—	—	—	166	1.6	-0.4	1.6	221	6.8	4.5	5.1	265	19.9	19.8	1.6	270	34.2	34.2	0.2	—	—	—	—
16	—	—	—	—	—	—	—	—	152	1.7	-0.8	1.5	232	5.1	4.0	3.1	261	24.2	23.9	3.7	266	31.8	31.7	2.2	—	—	—	—
17	—	—	—	—	—	—	—	—	135	1.3	-0.9	0.9	220	4.2	2.7	3.2	271	21.4	21.4	-0.2	269	29.9	29.9	0.6	—	—	—	—
18	—	—	—	—	—	—	—	—	169	1.0	-0.2	1.0	235	3.8	3.1	2.2	265	21.2	21.1	1.8	270	29.5	29.5	0.0	253	25.0	23.9	7.3
19	—	—	—	—	—	—	—	—	138	1.5	-1.0	1.1	242	4.4	3.9	2.1	275	18.4	18.3	-1.6	259	26.5	26.0	4.9	272	35.0	35.0	-1.2
20	—	—	—	—	—	—	—	—	141	1.3	-0.8	1.0	232	6.1	4.8	3.8	265	23.0	22.9	2.1	262	22.6	22.4	3.3	—	—	—	—
21	—	—	—	—	—	—	—	—	158	1.8	-0.7	1.7	231	5.8	4.5	3.6	264	22.7	22.6	2.2	274	29.4	29.3	-2.1	262	40.0	39.6	5.6
22	—	—	—	—	—	—	—	—	135	1.7	-1.2	1.2	240	6.6	5.7	3.3	256	24.2	23.5	5.9	265	29.4	29.3	2.4	—	—	—	—
23	—	—	—	—	—	—	—	—	153	2.0	-0.9	1.8	230	5.1	3.9	3.3	267	22.3	22.3	1.3	261	28.5	28.2	4.3	290	31.8	29.9	-10.9
24	—	—	—	—	—	—	—	—	114	1.7	-1.6	0.7	215	5.1	2.9	4.2	258	20.7	20.2	4.4	277	27.7	27.5	-3.3	270	16.0	16.0	0.0
25	—	—	—	—	—	—	—	—	148	2.5	-1.3	2.1	236	8.5	7.0	4.8	260	23.6	23.3	4.0	261	26.9	26.6	4.1	—	—	—	—
26	—	—	—	—	—	—	—	—	160	1.5	-0.5	1.4	215	5.5	3.1	4.5	259	24.3	23.9	4.6	266	29.1	29.0	2.2	267	22.8	22.8	1.3
27	—	—	—	—	—	—	—	—	135	0.7	-0.5	0.5	235	5.0	4.1	2.9	269	23.8	23.8	0.3	275	32.8	32.7	-2.7	247	26.0	23.9	10.2
28	—	—	—	—	—	—	—	—	117	0.2	-0.2	0.1	245	5.1	4.6	2.1	268	26.7	26.7	1.0	288	26.5	25.2	-8.1	264	23.0	22.9	2.4
29	—	—	—	—	—	—	—	—	166	0.8	-0.2	0.8	213	4.6	2.5	3.9	274	15.5	15.5	-1.0	288	26.5	25.3	-8.0	262	26.1	25.9	3.5
30	—	—	—	—	—	—	—	—	149	2.3	-1.2	2.0	233	6.2	5.0	3.7	257	24.8	24.2	5.4	270	36.8	36.8	0.0	282	20.3	19.8	-4.3

Daily Normals of Upper Air Winds (1971-2000)

SRINAGAR

DECEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	—	—	—	—	74	1.5	-1.4	-0.4	143	1.5	-0.9	1.2	233	7.2	5.8	4.3	265	24.2	24.1	2.2	258	27.5	26.9	5.6	255	44.0	42.5	11.4			
2	—	—	—	—	143	0.5	-0.3	0.4	147	4.3	-2.3	3.6	220	9.9	6.4	7.6	254	24.4	23.5	6.7	265	31.2	31.1	2.7	NaN	NaN	NaN	NaN			
3	—	—	—	—	—	—	—	—	163	2.4	-0.7	2.3	226	10.2	7.3	7.1	253	27.7	26.5	8.0	259	41.4	40.7	7.8	260	24.0	23.6	4.2			
4	—	—	—	—	—	—	—	—	176	1.3	-0.1	1.3	238	8.9	7.6	4.7	265	25.8	25.7	2.1	263	32.3	32.1	3.8	NaN	NaN	NaN	NaN			
5	—	—	—	—	—	—	—	—	153	1.6	-0.7	1.4	222	6.0	4.0	4.5	266	23.2	23.1	1.8	271	35.0	35.0	-0.5	285	30.0	29.0	-7.8			
6	—	—	—	—	—	—	—	—	142	1.6	-1.0	1.3	222	6.3	4.2	4.7	273	18.9	18.9	-1.1	281	30.2	29.6	-5.9	250	12.0	11.3	4.1			
7	—	—	—	—	—	—	—	—	155	1.4	-0.6	1.3	246	6.4	5.8	2.6	269	23.3	23.3	0.6	275	34.0	33.9	-2.8	NaN	NaN	NaN	NaN			
8	—	—	—	—	—	—	—	—	90	0.6	-0.6	0.0	235	3.7	3.0	2.1	260	21.7	21.4	3.6	266	31.5	31.4	2.4	270	22.0	22.0	0.0			
9	—	—	—	—	—	—	—	—	180	0.9	0.0	0.9	230	5.9	4.5	3.8	262	28.9	28.6	4.2	264	39.3	39.1	3.8	NaN	NaN	NaN	NaN			
10	—	—	—	—	—	—	—	—	188	0.7	0.1	0.7	243	6.8	6.1	3.1	267	18.7	18.7	1.1	268	34.8	34.8	1.5	264	30.0	29.8	3.0			
11	—	—	—	—	—	—	—	—	148	0.9	-0.5	0.8	243	5.8	5.2	2.6	267	19.5	19.5	0.9	266	30.6	30.5	2.4	—	—	—	—			
12	—	—	—	—	—	—	—	—	101	0.5	-0.5	0.1	244	7.4	6.7	3.2	268	24.4	24.4	1.0	273	31.6	31.5	-1.9	285	7.0	6.8	-1.8			
13	—	—	—	—	—	—	—	—	153	0.9	-0.4	0.8	249	7.2	6.7	2.6	271	25.8	25.8	-0.3	285	37.9	36.6	-9.7	NaN	NaN	NaN	NaN			
14	—	—	—	—	—	—	—	—	135	1.6	-1.1	1.1	248	8.4	7.8	3.2	268	25.3	25.3	0.7	260	33.7	33.2	5.7	NaN	NaN	NaN	NaN			
15	—	—	—	—	—	—	—	—	207	0.4	0.2	0.4	240	6.7	5.8	3.4	275	18.9	18.8	-1.5	279	28.6	28.2	-4.7	NaN	NaN	NaN	NaN			
16	—	—	—	—	—	—	—	—	118	1.5	-1.3	0.7	222	6.9	4.6	5.1	261	20.1	19.8	3.2	272	29.1	29.1	-1.1	NaN	NaN	NaN	NaN			
17	—	—	—	—	—	—	—	—	126	2.2	-1.8	1.3	240	7.3	6.3	3.6	254	22.9	22.0	6.3	270	30.9	30.9	-0.2	317	22.0	15.0	-16.1			
18	—	—	—	—	—	—	—	—	133	2.2	-1.6	1.5	243	8.6	7.7	3.9	261	25.8	25.5	4.1	264	34.6	34.4	3.5	256	25.0	24.3	6.0			
19	—	—	—	—	—	—	—	—	133	2.2	-1.6	1.5	225	9.5	6.8	6.7	257	24.9	24.2	5.7	264	34.7	34.5	3.8	275	39.0	38.9	-3.4			
20	—	—	—	—	120	2.0	-1.7	1.0	137	1.8	-1.2	1.3	237	8.4	7.0	4.6	272	27.5	27.5	-0.8	271	38.1	38.1	-0.9	NaN	NaN	NaN	NaN			
21	—	—	—	—	—	—	—	—	151	1.3	-0.6	1.1	226	9.5	6.9	6.6	256	23.9	23.2	5.6	266	38.6	38.5	2.6	NaN	NaN	NaN	NaN			
22	—	—	—	—	—	—	—	—	128	1.8	-1.4	1.1	233	7.9	6.3	4.7	264	24.5	24.4	2.4	272	29.3	29.3	-1.0	275	9.0	9.0	-0.8			
23	—	—	—	—	—	—	—	—	143	1.5	-0.9	1.2	252	7.6	7.2	2.4	269	26.4	26.4	0.5	279	41.9	41.4	-6.5	290	13.0	12.2	-4.4			
24	—	—	—	—	—	—	—	—	131	2.0	-1.5	1.3	229	7.2	5.5	4.7	265	22.2	22.1	1.8	266	37.0	36.9	2.5	265	19.0	18.9	1.7			
25	—	—	—	—	333	0.4	0.2	-0.4	160	3.0	-1.0	2.8	224	10.0	6.9	7.2	249	26.0	24.3	9.3	264	33.9	33.7	3.6	NaN	NaN	NaN	NaN			
26	—	—	—	—	—	—	—	—	150	2.0	-1.0	1.7	243	6.4	5.7	2.9	267	22.5	22.5	1.3	276	32.0	31.8	-3.2	266	24.0	23.9	1.7			
27	—	—	—	—	143	0.5	-0.3	0.4	165	1.1	-0.3	1.1	214	7.6	4.2	6.3	261	22.0	21.7	3.5	288	28.4	27.0	-8.8	NaN	NaN	NaN	NaN			
28	—	—	—	—	—	—	—	—	114	1.7	-1.6	0.7	223	6.8	4.6	5.0	259	23.3	22.9	4.5	266	34.2	34.1	2.5	276	30.1	29.9	-3.4			
29	—	—	—	—	—	—	—	—	133	1.8	-1.3	1.2	233	6.0	4.8	3.6	266	23.4	23.3	1.7	268	32.1	32.1	1.3	NaN	NaN	NaN	NaN			
30	—	—	—	—	—	—	—	—	72	0.6	-0.6	-0.2	263	4.7	4.7	0.6	285	27.5	26.6	-6.9	280	32.9	32.4	-5.5	NaN	NaN	NaN	NaN			
31	—	—	—	—	—	—	—	—	159	0.9	-0.3	0.8	247	6.9	6.3	2.7	267	21.6	21.6	1.3	266	37.5	37.4	2.9	NaN	NaN	NaN	NaN			

Daily Normals of Upper Air Winds (1971-2000)

THIRUVANANTHAPURAM

JANUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	23	0.8	-0.3	-0.7	49	3.8	-2.9	-2.5	79	3.6	-3.5	-0.7	86	7.3	-7.3	-0.5	128	3.7	-2.9	2.3	159	5.5	-2.0	5.1	109	6.5	-6.2	2.1
2	29	2.9	-1.4	-2.5	48	4.2	-3.1	-2.8	70	4.4	-4.1	-1.5	66	6.8	-6.2	-2.8	117	2.9	-2.6	1.3	149	6.6	-3.4	5.6	96	3.9	-3.9	0.4
3	32	2.6	-1.4	-2.2	46	3.6	-2.6	-2.5	81	3.1	-3.1	-0.5	72	6.3	-6.0	-2.0	121	4.3	-3.7	2.2	162	5.4	-1.7	5.1	86	3.9	-3.9	-0.3
4	16	2.5	-0.7	-2.4	41	4.3	-2.8	-3.2	62	2.6	-2.3	-1.2	65	5.2	-4.7	-2.2	120	3.4	-3.0	1.7	174	5.7	-0.6	5.7	93	3.3	-3.3	0.2
5	352	2.1	0.3	-2.1	42	4.8	-3.2	-3.6	48	2.7	-2.0	-1.8	82	4.9	-4.8	-0.7	165	1.6	-0.4	1.5	174	4.4	-0.5	4.4	81	3.1	-3.1	-0.5
6	27	1.3	-0.6	-1.2	41	3.8	-2.5	-2.9	22	1.8	-0.7	-1.7	92	3.6	-3.6	0.1	168	1.9	-0.4	1.9	171	5.0	-0.8	4.9	135	1.8	-1.3	1.3
7	90	1.0	-1.0	0.0	53	4.6	-3.7	-2.8	53	2.1	-1.7	-1.3	86	3.0	-3.0	-0.2	174	2.7	-0.3	2.7	185	5.4	0.5	5.4	99	3.2	-3.2	0.5
8	31	1.2	-0.6	-1.0	47	5.2	-3.8	-3.5	65	3.1	-2.8	-1.3	67	3.3	-3.0	-1.3	198	2.3	0.7	2.2	198	6.6	2.1	6.3	158	2.2	-0.8	2.0
9	18	1.6	-0.5	-1.5	50	4.3	-3.3	-2.8	72	3.2	-3.0	-1.0	87	4.3	-4.3	-0.2	223	2.1	1.4	1.5	178	6.7	-0.2	6.7	77	2.2	-2.1	-0.5
10	354	0.9	0.1	-0.9	40	3.8	-2.4	-2.9	69	2.2	-2.1	-0.8	92	3.7	-3.7	0.1	230	2.6	2.0	1.7	172	6.4	-0.9	6.3	123	4.3	-3.6	2.3
11	324	0.9	0.5	-0.7	50	3.4	-2.6	-2.2	45	2.0	-1.4	-1.4	53	3.1	-2.5	-1.9	198	3.3	1.0	3.1	186	5.6	0.6	5.6	126	3.2	-2.6	1.9
12	333	0.7	0.3	-0.6	41	4.6	-3.0	-3.5	57	2.4	-2.0	-1.3	58	4.4	-3.7	-2.3	233	3.1	2.5	1.9	190	6.6	1.2	6.5	105	3.4	-3.3	0.9
13	291	1.4	1.3	-0.5	31	4.1	-2.1	-3.5	57	3.0	-2.5	-1.6	68	4.8	-4.5	-1.8	218	2.3	1.4	1.8	189	6.8	1.1	6.7	109	5.0	-4.7	1.6
14	207	0.2	0.1	0.2	42	5.0	-3.3	-3.7	43	2.6	-1.8	-1.9	67	4.3	-4.0	-1.7	230	3.9	3.0	2.5	189	5.7	0.9	5.6	106	2.2	-2.1	0.6
15	338	0.5	0.2	-0.5	42	5.1	-3.4	-3.8	79	2.0	-2.0	-0.4	84	4.8	-4.8	-0.5	270	1.5	1.5	0.0	169	6.0	-1.2	5.9	122	2.8	-2.4	1.5
16	18	0.3	-0.1	-0.3	53	5.3	-4.2	-3.2	72	2.5	-2.4	-0.8	98	3.5	-3.5	0.5	114	2.2	-2.0	0.9	149	6.1	-3.1	5.2	96	4.0	-4.0	0.4
17	63	0.4	-0.4	-0.2	52	5.3	-4.2	-3.3	97	3.4	-3.4	0.4	83	3.8	-3.8	-0.5	144	2.9	-1.7	2.3	166	7.0	-1.7	6.8	118	3.8	-3.4	1.8
18	34	1.4	-0.8	-1.2	58	5.1	-4.3	-2.7	81	3.3	-3.3	-0.5	83	4.3	-4.3	-0.5	162	2.9	-0.9	2.8	174	6.0	-0.6	6.0	126	6.5	-5.3	3.8
19	45	1.4	-1.0	-1.0	40	5.2	-3.3	-4.0	81	1.8	-1.8	-0.3	63	4.4	-3.9	-2.0	160	1.5	-0.5	1.4	172	5.2	-0.7	5.2	106	6.0	-5.8	1.7
20	337	1.5	0.6	-1.4	43	4.4	-3.0	-3.2	69	1.9	-1.8	-0.7	75	4.1	-4.0	-1.1	180	2.4	0.0	2.4	189	7.4	1.2	7.3	107	4.5	-4.3	1.3
21	351	2.0	0.3	-2.0	40	5.0	-3.2	-3.8	50	1.7	-1.3	-1.1	68	5.3	-4.9	-2.0	171	1.9	-0.3	1.9	163	6.3	-1.8	6.0	141	3.3	-2.1	2.6
22	270	0.7	0.7	0.0	47	5.2	-3.8	-3.6	55	3.8	-3.1	-2.2	62	4.2	-3.7	-2.0	171	2.6	-0.4	2.6	166	5.8	-1.4	5.6	86	2.8	-2.8	-0.2
23	162	1.3	-0.4	1.2	45	5.4	-3.8	-3.8	65	4.3	-3.9	-1.8	65	4.5	-4.1	-1.9	193	2.2	0.5	2.1	171	6.7	-1.0	6.6	96	4.4	-4.4	0.5
24	66	2.2	-2.0	-0.9	46	5.7	-4.1	-4.0	49	3.5	-2.6	-2.3	86	4.5	-4.5	-0.3	171	1.3	-0.2	1.3	161	5.4	-1.8	5.1	111	4.7	-4.4	1.7
25	297	0.4	0.4	-0.2	52	4.4	-3.5	-2.7	68	3.7	-3.4	-1.4	80	4.8	-4.7	-0.8	90	1.2	-1.2	0.0	154	5.1	-2.2	4.6	103	5.8	-5.7	1.3
26	27	1.3	-0.6	-1.2	44	6.4	-4.5	-4.6	68	2.4	-2.2	-0.9	81	3.0	-3.0	-0.5	104	1.6	-1.6	0.4	154	7.8	-3.4	7.0	138	1.5	-1.0	1.1
27	49	0.9	-0.7	-0.6	48	4.7	-3.5	-3.1	69	3.9	-3.6	-1.4	58	3.6	-3.1	-1.9	156	3.4	-1.4	3.1	151	7.5	-3.6	6.6	103	3.7	-3.6	0.8
28	63	0.4	-0.4	-0.2	54	5.3	-4.3	-3.1	77	2.8	-2.7	-0.6	63	4.2	-3.7	-1.9	165	2.3	-0.6	2.2	150	6.2	-3.1	5.4	124	3.7	-3.1	2.1
29	106	0.7	-0.7	0.2	48	5.1	-3.8	-3.4	75	3.0	-2.9	-0.8	75	4.1	-4.0	-1.1	172	1.5	-0.2	1.5	166	6.6	-1.6	6.4	147	1.7	-0.9	1.4
30	214	0.4	0.2	0.3	48	5.0	-3.7	-3.3	75	3.5	-3.4	-0.9	75	5.2	-5.0	-1.3	145	1.2	-0.7	1.0	185	6.3	0.5	6.3	120	3.4	-3.0	1.7
31	313	1.8	1.3	-1.2	46	4.7	-3.4	-3.3	72	3.3	-3.1	-1.0	63	3.9	-3.5	-1.8	143	2.1	-1.3	1.7	174	1.9	-0.2	1.9	111	2.6	-2.4	0.9

Daily Normals of Upper Air Winds (1971-2000)

386

THIRUVANANTHAPURAM

FEBRUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	323	2.0	1.2	-1.6	43	5.4	-3.7	-3.9	69	3.0	-2.8	-1.1	70	3.7	-3.5	-1.3	160	1.5	-0.5	1.4	185	3.2	0.3	3.2	99	3.2	-3.2	0.5			
2	287	1.0	1.0	-0.3	47	4.8	-3.5	-3.3	80	2.8	-2.8	-0.5	60	3.4	-3.0	-1.7	225	2.1	1.5	1.5	165	4.2	-1.1	4.1	81	4.6	-4.5	-0.7			
3	250	1.2	1.1	0.4	45	4.4	-3.1	-3.1	76	2.9	-2.8	-0.7	80	2.2	-2.2	-0.4	216	1.4	0.8	1.1	183	6.3	0.3	6.3	90	1.5	-1.5	0.0			
4	248	0.5	0.5	0.2	49	4.9	-3.7	-3.2	72	2.6	-2.5	-0.8	59	2.1	-1.8	-1.1	163	1.4	-0.4	1.3	153	4.4	-2.0	3.9	45	0.1	-0.1	-0.1			
5	207	1.1	0.5	1.0	53	5.1	-4.1	-3.1	61	2.6	-2.3	-1.3	60	2.0	-1.7	-1.0	135	3.0	-2.1	2.1	176	4.1	-0.3	4.1	96	3.0	-3.0	0.3			
6	194	0.4	0.1	0.4	47	5.4	-3.9	-3.7	66	2.7	-2.5	-1.1	47	1.8	-1.3	-1.2	198	2.3	0.7	2.2	194	2.9	0.7	2.8	101	4.2	-4.1	0.8			
7	313	2.2	1.6	-1.5	45	5.7	-4.0	-4.0	58	2.5	-2.1	-1.3	31	1.7	-0.9	-1.5	197	3.0	0.9	2.9	197	4.4	1.3	4.2	112	3.8	-3.5	1.4			
8	264	3.0	3.0	0.3	44	4.7	-3.3	-3.4	48	3.0	-2.2	-2.0	45	2.3	-1.6	-1.6	232	1.8	1.4	1.1	167	4.7	-1.1	4.6	117	2.9	-2.6	1.3			
9	257	1.8	1.8	0.4	37	4.3	-2.6	-3.4	39	2.6	-1.6	-2.0	67	2.5	-2.3	-1.0	240	1.4	1.2	0.7	175	4.4	-0.4	4.4	81	3.2	-3.2	-0.5			
10	237	1.7	1.4	0.9	48	5.0	-3.7	-3.3	35	3.3	-1.9	-2.7	51	2.2	-1.7	-1.4	242	2.1	1.9	1.0	186	5.6	0.6	5.6	97	3.1	-3.1	0.4			
11	252	0.9	0.9	0.3	43	4.7	-3.2	-3.4	55	3.2	-2.6	-1.8	60	3.6	-3.1	-1.8	94	1.4	-1.4	0.1	163	7.1	-2.1	6.8	122	4.1	-3.5	2.2			
12	273	2.0	2.0	-0.1	44	4.6	-3.2	-3.3	53	4.0	-3.2	-2.4	78	3.3	-3.2	-0.7	121	2.1	-1.8	1.1	167	7.5	-1.7	7.3	92	2.5	-2.5	0.1			
13	249	1.7	1.6	0.6	43	4.2	-2.9	-3.1	52	2.3	-1.8	-1.4	84	3.6	-3.6	-0.4	126	2.2	-1.8	1.3	158	6.9	-2.6	6.4	118	4.0	-3.5	1.9			
14	306	1.7	1.4	-1.0	44	4.2	-2.9	-3.0	49	2.8	-2.1	-1.8	92	3.8	-3.8	0.1	155	1.4	-0.6	1.3	148	7.5	-4.0	6.4	112	2.7	-2.5	1.0			
15	288	2.2	2.1	-0.7	46	3.7	-2.7	-2.6	62	2.4	-2.1	-1.1	83	3.8	-3.8	-0.5	76	1.6	-1.6	-0.4	132	7.3	-5.4	4.9	108	3.6	-3.4	1.1			
16	244	2.8	2.5	1.2	45	4.9	-3.5	-3.5	65	1.9	-1.7	-0.8	93	3.5	-3.5	0.2	95	3.4	-3.4	0.3	136	7.7	-5.4	5.5	110	4.1	-3.9	1.4			
17	250	1.2	1.1	0.4	45	4.8	-3.4	-3.4	73	3.7	-3.5	-1.1	84	3.1	-3.1	-0.3	109	4.6	-4.3	1.5	148	7.5	-4.0	6.3	115	1.7	-1.5	0.7			
18	293	2.1	1.9	-0.8	46	4.5	-3.2	-3.1	78	4.7	-4.6	-1.0	74	3.6	-3.5	-1.0	116	3.9	-3.5	1.7	136	5.8	-4.0	4.2	76	0.8	-0.8	-0.2			
19	297	2.5	2.2	-1.1	60	5.1	-4.4	-2.5	76	3.7	-3.6	-0.9	75	3.8	-3.7	-1.0	101	3.6	-3.5	0.7	105	4.1	-4.0	1.1	82	2.2	-2.2	-0.3			
20	265	1.2	1.2	0.1	52	4.8	-3.8	-3.0	66	3.6	-3.3	-1.5	68	4.8	-4.5	-1.8	78	3.4	-3.3	-0.7	130	7.2	-5.5	4.6	97	3.2	-3.2	0.4			
21	237	1.7	1.4	0.9	50	4.3	-3.3	-2.8	63	4.7	-4.2	-2.1	74	4.4	-4.2	-1.2	96	2.8	-2.8	0.3	142	7.5	-4.6	5.9	104	2.1	-2.0	0.5			
22	272	2.4	2.4	-0.1	47	5.4	-3.9	-3.7	72	4.2	-4.0	-1.3	75	4.9	-4.7	-1.3	122	1.9	-1.6	1.0	149	5.0	-2.6	4.3	124	2.2	-1.8	1.2			
23	247	0.8	0.7	0.3	55	5.1	-4.2	-2.9	60	5.1	-4.4	-2.5	78	5.2	-5.1	-1.1	119	1.8	-1.6	0.9	153	3.6	-1.6	3.2	103	2.3	-2.2	0.5			
24	344	0.7	0.2	-0.7	52	5.7	-4.5	-3.5	70	4.1	-3.9	-1.4	80	4.8	-4.7	-0.8	102	2.5	-2.4	0.5	143	3.5	-2.1	2.8	117	2.0	-1.8	0.9			
25	273	1.8	1.8	-0.1	42	5.8	-3.9	-4.3	67	3.8	-3.5	-1.5	74	4.4	-4.2	-1.2	138	2.4	-1.6	1.8	147	3.5	-1.9	2.9	70	2.9	-2.7	-1.0			
26	258	2.4	2.3	0.5	50	4.8	-3.7	-3.1	60	4.6	-4.0	-2.3	70	3.5	-3.3	-1.2	166	2.5	-0.6	2.4	165	3.1	-0.8	3.0	124	1.1	-0.9	0.6			
27	288	0.3	0.3	-0.1	54	5.7	-4.6	-3.3	64	5.5	-4.9	-2.4	82	3.5	-3.5	-0.5	221	2.0	1.3	1.5	185	3.5	0.3	3.5	56	2.5	-2.1	-1.4			
28	355	1.1	0.1	-1.1	49	4.6	-3.5	-3.0	71	4.6	-4.3	-1.5	67	3.9	-3.6	-1.5	187	0.8	0.1	0.8	158	3.2	-1.2	3.0	102	3.8	-3.7	0.8			
29	43	2.1	-1.4	-1.5	53	4.5	-3.6	-2.7	89	6.3	-6.3	-0.1	66	7.7	-7.1	-3.1	144	3.2	-1.9	2.6	137	4.5	-3.1	3.3	174	4.1	-0.4	4.1			

Daily Normals of Upper Air Winds (1971-2000)

387

THIRUVANANTHAPURAM

MARCH

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	243	0.2	0.2	0.1	57	5.6	-4.7	-3.0	77	4.1	-4.0	-0.9	65	4.4	-4.0	-1.9	137	2.1	-1.4	1.5	178	3.3	-0.1	3.3	118	5.3	-4.7	2.5			
2	227	1.6	1.2	1.1	50	6.5	-5.0	-4.2	67	4.7	-4.3	-1.8	63	3.6	-3.2	-1.6	124	0.7	-0.6	0.4	169	4.4	-0.8	4.3	180	2.3	0.0	2.3			
3	217	0.5	0.3	0.4	52	5.8	-4.6	-3.6	63	6.2	-5.5	-2.8	61	3.8	-3.3	-1.8	153	2.5	-1.1	2.2	198	5.7	1.8	5.4	119	2.1	-1.8	1.0			
4	208	1.5	0.7	1.3	65	5.0	-4.5	-2.1	63	4.4	-3.9	-2.0	62	4.5	-4.0	-2.1	147	2.0	-1.1	1.7	170	6.6	-1.2	6.5	126	3.4	-2.8	2.0			
5	203	2.3	0.9	2.1	58	4.6	-3.9	-2.4	70	5.2	-4.9	-1.8	91	4.2	-4.2	0.1	212	1.9	1.0	1.6	195	4.3	1.1	4.2	360	1.1	0.0	-1.1			
6	267	1.7	1.7	0.1	50	5.1	-3.9	-3.3	62	2.4	-2.1	-1.1	81	4.0	-4.0	-0.6	221	1.1	0.7	0.8	185	3.2	0.3	3.2	76	3.6	-3.5	-0.9			
7	245	1.9	1.7	0.8	63	4.8	-4.3	-2.2	59	4.8	-4.1	-2.5	69	3.3	-3.1	-1.2	238	0.9	0.8	0.5	210	4.0	2.0	3.5	87	2.2	-2.2	-0.1			
8	241	1.8	1.6	0.9	50	5.0	-3.8	-3.2	52	4.9	-3.9	-3.0	82	4.2	-4.2	-0.6	273	1.7	1.7	-0.1	224	4.5	3.1	3.2	67	2.3	-2.1	-0.9			
9	239	2.6	2.2	1.3	48	5.2	-3.9	-3.5	63	6.7	-6.0	-3.0	72	4.7	-4.5	-1.5	259	0.5	0.5	0.1	199	2.4	0.8	2.3	90	3.4	-3.4	0.0			
10	216	1.4	0.8	1.1	63	4.6	-4.1	-2.1	72	6.6	-6.3	-2.0	67	4.7	-4.3	-1.8	194	0.8	0.2	0.8	198	3.2	1.0	3.0	115	3.5	-3.2	1.5			
11	221	2.0	1.3	1.5	58	5.2	-4.4	-2.8	72	6.3	-6.0	-1.9	59	3.7	-3.2	-1.9	217	1.0	0.6	0.8	206	5.0	2.2	4.5	112	5.4	-5.0	2.0			
12	297	2.5	2.2	-1.1	54	5.3	-4.3	-3.1	63	6.6	-5.9	-3.0	101	3.6	-3.5	0.7	297	0.4	0.4	-0.2	205	3.3	1.4	3.0	107	1.0	-1.0	0.3			
13	291	2.8	2.6	-1.0	55	5.7	-4.7	-3.3	61	6.4	-5.6	-3.1	79	2.5	-2.5	-0.5	252	2.8	2.7	0.9	222	3.8	2.5	2.8	112	1.8	-1.7	0.7			
14	247	1.3	1.2	0.5	52	5.4	-4.3	-3.3	57	7.9	-6.6	-4.3	70	4.6	-4.3	-1.6	248	1.8	1.7	0.7	213	5.4	2.9	4.5	90	2.0	-2.0	0.0			
15	241	2.6	2.3	1.3	56	5.2	-4.3	-2.9	68	8.1	-7.5	-3.0	74	5.3	-5.1	-1.5	231	2.1	1.6	1.3	224	6.1	4.2	4.4	86	3.0	-3.0	-0.2			
16	248	1.1	1.0	0.4	60	4.6	-4.0	-2.3	66	8.2	-7.5	-3.3	78	6.1	-6.0	-1.3	212	3.8	2.0	3.2	206	5.0	2.2	4.5	112	4.6	-4.3	1.7			
17	243	2.2	2.0	1.0	55	5.0	-4.1	-2.9	71	7.2	-6.8	-2.4	79	3.2	-3.1	-0.6	212	3.2	1.7	2.7	202	6.1	2.3	5.7	141	1.3	-0.8	1.0			
18	267	1.7	1.7	0.1	51	5.0	-3.9	-3.2	70	7.1	-6.7	-2.4	81	3.6	-3.6	-0.6	201	3.4	1.2	3.2	207	4.6	2.1	4.1	111	4.8	-4.5	1.7			
19	184	1.4	0.1	1.4	58	5.3	-4.5	-2.8	68	9.0	-8.3	-3.4	67	4.8	-4.4	-1.9	207	3.6	1.6	3.2	198	5.2	1.6	4.9	118	4.0	-3.5	1.9			
20	194	1.2	0.3	1.2	67	4.6	-4.2	-1.8	63	9.4	-8.4	-4.3	54	3.1	-2.5	-1.8	223	2.3	1.6	1.7	203	4.8	1.9	4.4	89	5.3	-5.3	-0.1			
21	266	2.6	2.6	0.2	54	4.3	-3.5	-2.5	60	9.3	-8.0	-4.7	70	3.0	-2.8	-1.0	243	2.9	2.6	1.3	229	4.8	3.6	3.1	104	4.4	-4.3	1.1			
22	277	2.6	2.6	-0.3	62	4.1	-3.6	-1.9	58	8.9	-7.5	-4.7	70	4.1	-3.9	-1.4	233	3.5	2.8	2.1	201	4.8	1.7	4.5	105	6.0	-5.8	1.6			
23	221	2.3	1.5	1.7	57	4.4	-3.7	-2.4	72	7.6	-7.2	-2.3	63	3.4	-3.0	-1.5	250	3.3	3.1	1.1	207	5.7	2.6	5.1	116	3.9	-3.5	1.7			
24	249	1.4	1.3	0.5	50	3.8	-2.9	-2.4	60	7.3	-6.3	-3.7	68	3.1	-2.9	-1.2	253	2.8	2.7	0.8	224	7.9	5.5	5.7	143	2.5	-1.5	2.0			
25	270	3.2	3.2	0.0	61	4.3	-3.8	-2.1	61	8.8	-7.7	-4.3	55	1.6	-1.3	-0.9	238	4.5	3.8	2.4	217	7.8	4.7	6.2	330	0.8	0.4	-0.7			
26	261	2.0	2.0	0.3	62	5.5	-4.9	-2.6	61	8.0	-7.0	-3.9	75	2.8	-2.7	-0.7	231	4.4	3.4	2.8	244	6.4	5.8	2.8	80	2.9	-2.9	-0.5			
27	297	1.8	1.6	-0.8	63	4.7	-4.2	-2.1	63	8.0	-7.2	-3.6	78	3.4	-3.3	-0.7	252	2.3	2.2	0.7	230	4.2	3.2	2.7	140	3.3	-2.1	2.5			
28	301	3.5	3.0	-1.8	66	4.7	-4.3	-1.9	63	7.3	-6.5	-3.3	66	2.4	-2.2	-1.0	229	2.0	1.5	1.3	222	4.0	2.7	3.0	133	2.6	-1.9	1.8			
29	261	3.2	3.2	0.5	59	4.1	-3.5	-2.1	66	7.0	-6.4	-2.9	70	5.5	-5.2	-1.9	345	1.1	0.3	-1.1	220	5.0	3.2	3.8	114	3.5	-3.2	1.4			
30	257	1.7	1.7	0.4	61	3.9	-3.4	-1.9	68	6.8	-6.3	-2.6	87	4.2	-4.2	-0.2	168	2.4	-0.5	2.3	196	3.7	1.0	3.6	92	3.4	-3.4	0.1			
31	280	2.7	2.7	-0.5	49	4.0	-3.0	-2.6	59	6.9	-5.9	-3.6	63	2.9	-2.6	-1.3	180	3.5	0.0	3.5	193	4.1	0.9	4.0	86	4.1	-4.1	-0.3			

Daily Normals of Upper Air Winds (1971-2000)

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THIRUVANANTHAPURAM

APRIL

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	281	4.1	4.0	-0.8	43	3.4	-2.3	-2.5	62	7.8	-6.9	-3.7	85	3.7	-3.7	-0.3	194	1.2	0.3	1.2	177	4.4	-0.2	4.4	74	1.9	-1.8	-0.5			
2	248	2.4	2.2	0.9	48	3.1	-2.3	-2.1	60	6.4	-5.6	-3.2	89	3.9	-3.9	-0.1	202	1.6	0.6	1.5	194	5.7	1.4	5.5	124	2.5	-2.1	1.4			
3	213	3.8	2.1	3.2	54	3.4	-2.8	-2.0	64	7.1	-6.4	-3.1	84	3.9	-3.9	-0.4	178	3.0	-0.1	3.0	161	5.4	-1.8	5.1	83	2.4	-2.4	-0.3			
4	230	1.7	1.3	1.1	57	4.2	-3.5	-2.3	65	7.1	-6.4	-3.0	90	3.4	-3.4	0.0	208	2.4	1.1	2.1	181	4.6	0.1	4.6	112	4.0	-3.7	1.5			
5	291	0.9	0.8	-0.3	71	3.4	-3.2	-1.1	60	5.6	-4.8	-2.8	84	3.9	-3.9	-0.4	218	1.1	0.7	0.9	188	5.6	0.8	5.5	121	3.5	-3.0	1.8			
6	277	0.8	0.8	-0.1	58	3.9	-3.3	-2.1	62	6.7	-5.9	-3.1	76	4.0	-3.9	-1.0	129	0.6	-0.5	0.4	154	3.9	-1.7	3.5	126	3.4	-2.8	2.0			
7	278	0.7	0.7	-0.1	58	3.4	-2.9	-1.8	67	6.9	-6.3	-2.7	75	4.1	-4.0	-1.1	115	2.9	-2.6	1.2	182	3.1	0.1	3.1	104	5.0	-4.9	1.2			
8	273	2.2	2.2	-0.1	53	4.3	-3.4	-2.6	63	7.4	-6.6	-3.3	74	4.6	-4.4	-1.3	124	2.2	-1.8	1.2	199	2.8	0.9	2.6	123	4.6	-3.9	2.5			
9	280	2.9	2.9	-0.5	47	3.5	-2.6	-2.4	71	7.2	-6.8	-2.4	88	4.7	-4.7	-0.2	115	2.6	-2.4	1.1	155	1.9	-0.8	1.7	121	3.9	-3.3	2.0			
10	285	2.4	2.3	-0.6	45	3.0	-2.1	-2.1	59	7.5	-6.4	-3.9	81	4.9	-4.8	-0.8	111	2.2	-2.1	0.8	153	3.5	-1.6	3.1	88	5.3	-5.3	-0.2			
11	280	3.6	3.5	-0.6	36	2.9	-1.7	-2.3	56	7.2	-6.0	-4.0	77	4.9	-4.8	-1.1	90	2.6	-2.6	0.0	113	4.3	-4.0	1.7	112	4.3	-4.0	1.6			
12	298	2.6	2.3	-1.2	47	2.5	-1.8	-1.7	62	7.4	-6.5	-3.5	84	4.5	-4.5	-0.5	121	3.5	-3.0	1.8	123	4.8	-4.0	2.6	121	3.1	-2.7	1.6			
13	272	3.1	3.1	-0.1	60	2.2	-1.9	-1.1	62	6.2	-5.5	-2.9	97	3.1	-3.1	0.4	121	2.3	-2.0	1.2	144	5.6	-3.3	4.5	94	2.6	-2.6	0.2			
14	298	1.7	1.5	-0.8	47	2.6	-1.9	-1.8	58	6.2	-5.3	-3.3	78	3.9	-3.8	-0.8	144	2.4	-1.4	1.9	180	2.5	0.0	2.5	58	0.9	-0.8	-0.5			
15	301	3.3	2.8	-1.7	41	2.3	-1.5	-1.7	67	7.0	-6.5	-2.7	64	3.7	-3.3	-1.6	308	1.1	0.9	-0.7	187	3.1	0.4	3.1	122	3.6	-3.1	1.9			
16	293	3.3	3.0	-1.3	14	2.9	-0.7	-2.8	59	6.5	-5.6	-3.3	84	3.7	-3.7	-0.4	225	0.7	0.5	0.5	234	2.4	1.9	1.4	111	3.1	-2.9	1.1			
17	277	3.4	3.4	-0.4	39	2.7	-1.7	-2.1	59	7.7	-6.6	-3.9	78	3.3	-3.2	-0.7	235	1.2	1.0	0.7	215	5.5	3.1	4.5	108	3.6	-3.4	1.1			
18	281	3.2	3.1	-0.6	3	2.0	-0.1	-2.0	69	7.1	-6.6	-2.5	88	3.5	-3.5	-0.1	225	2.7	1.9	1.9	190	5.3	0.9	5.2	81	3.3	-3.3	-0.5			
19	288	3.8	3.6	-1.2	42	3.0	-2.0	-2.2	62	7.4	-6.5	-3.5	77	2.7	-2.6	-0.6	249	2.2	2.1	0.8	197	6.2	1.8	5.9	109	5.0	-4.7	1.6			
20	278	2.8	2.8	-0.4	40	3.0	-1.9	-2.3	67	7.8	-7.2	-3.0	93	3.3	-3.3	0.2	240	4.2	3.6	2.1	205	3.8	1.6	3.4	110	4.7	-4.4	1.6			
21	310	4.5	3.5	-2.9	18	2.9	-0.9	-2.8	52	7.3	-5.7	-4.5	78	3.9	-3.8	-0.8	270	2.3	2.3	0.0	223	4.7	3.2	3.4	109	4.0	-3.8	1.3			
22	298	5.4	4.8	-2.5	18	2.2	-0.7	-2.1	57	5.9	-5.0	-3.2	68	2.4	-2.2	-0.9	272	3.1	3.1	-0.1	228	4.7	3.5	3.1	86	4.2	-4.2	-0.3			
23	305	3.7	3.0	-2.1	15	3.1	-0.8	-3.0	58	6.1	-5.2	-3.2	87	2.1	-2.1	-0.1	250	3.3	3.1	1.1	233	4.4	3.5	2.6	96	4.6	-4.6	0.5			
24	297	5.6	5.0	-2.6	14	2.5	-0.6	-2.4	53	6.1	-4.9	-3.7	32	1.5	-0.8	-1.3	261	3.1	3.1	0.5	171	2.4	-0.4	2.4	101	7.1	-7.0	1.3			
25	295	2.6	2.4	-1.1	13	3.1	-0.7	-3.0	51	6.9	-5.4	-4.3	27	0.9	-0.4	-0.8	270	2.3	2.3	0.0	197	3.4	1.0	3.2	115	4.2	-3.8	1.8			
26	277	3.3	3.3	-0.4	6	2.8	-0.3	-2.8	60	7.2	-6.2	-3.6	43	1.6	-1.1	-1.2	256	1.6	1.6	0.4	172	6.0	-0.8	5.9	92	7.2	-7.2	0.2			
27	301	3.9	3.3	-2.0	3	3.6	-0.2	-3.6	58	5.9	-5.0	-3.1	36	1.4	-0.8	-1.1	308	1.1	0.9	-0.7	160	4.5	-1.5	4.2	86	6.5	-6.5	-0.5			
28	295	5.0	4.5	-2.1	5	3.4	-0.3	-3.4	58	6.2	-5.2	-3.3	48	2.4	-1.8	-1.6	293	2.5	2.3	-1.0	171	2.6	-0.4	2.6	101	8.1	-8.0	1.5			
29	312	6.0	4.5	-4.0	355	3.3	0.3	-3.3	57	5.4	-4.5	-2.9	48	2.8	-2.1	-1.9	4	1.6	-0.1	-1.6	138	1.5	-1.0	1.1	97	8.0	-7.9	1.0			
30	302	4.9	4.1	-2.6	6	3.1	-0.3	-3.1	56	4.8	-4.0	-2.7	35	2.9	-1.7	-2.4	277	0.8	0.8	-0.1	159	1.7	-0.6	1.6	106	7.4	-7.1	2.0			

Daily Normals of Upper Air Winds (1971-2000)

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THIRUVANANTHAPURAM

MAY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	295	3.8	3.5	-1.6	348	3.4	0.7	-3.3	47	5.1	-3.7	-3.5	52	1.8	-1.4	-1.1	104	0.4	-0.4	0.1	137	2.3	-1.6	1.7	89	8.7	-8.7	-0.1			
2	291	4.4	4.1	-1.6	332	3.4	1.6	-3.0	53	5.4	-4.3	-3.2	45	2.1	-1.5	-1.5	52	1.1	-0.9	-0.7	116	6.1	-5.5	2.7	94	7.9	-7.9	0.6			
3	307	4.5	3.6	-2.7	338	2.9	1.1	-2.7	61	5.4	-4.7	-2.6	90	2.7	-2.7	0.0	66	3.0	-2.7	-1.2	108	4.3	-4.1	1.3	105	8.3	-8.0	2.2			
4	299	4.7	4.1	-2.3	333	3.1	1.4	-2.8	52	6.6	-5.2	-4.0	75	2.0	-1.9	-0.5	95	1.2	-1.2	0.1	115	6.6	-6.0	2.8	87	9.7	-9.7	-0.5			
5	302	5.2	4.4	-2.7	331	4.1	2.0	-3.6	44	5.6	-3.9	-4.0	18	0.6	-0.2	-0.6	128	1.1	-0.9	0.7	112	5.1	-4.7	1.9	87	10.4	-10.4	-0.6			
6	278	4.9	4.8	-0.7	338	3.2	1.2	-3.0	55	4.7	-3.9	-2.7	51	1.9	-1.5	-1.2	96	1.0	-1.0	0.1	106	3.5	-3.4	1.0	101	8.7	-8.6	1.6			
7	276	3.9	3.9	-0.4	320	3.8	2.4	-2.9	44	5.2	-3.6	-3.7	46	3.0	-2.2	-2.1	112	2.2	-2.0	0.8	126	4.3	-3.5	2.5	92	9.7	-9.7	0.3			
8	289	6.4	6.0	-2.1	315	4.1	2.9	-2.9	44	5.8	-4.0	-4.2	61	2.5	-2.2	-1.2	62	3.0	-2.6	-1.4	90	5.0	-5.0	0.0	95	7.3	-7.3	0.7			
9	302	7.0	5.9	-3.7	325	5.2	3.0	-4.3	43	5.9	-4.0	-4.3	52	1.6	-1.3	-1.0	103	2.6	-2.5	0.6	110	5.9	-5.6	2.0	90	8.1	-8.1	0.0			
10	301	7.2	6.2	-3.7	321	4.8	3.0	-3.7	42	4.8	-3.2	-3.6	48	1.5	-1.1	-1.0	189	0.6	0.1	0.6	118	5.8	-5.1	2.7	92	9.8	-9.8	0.4			
11	302	6.5	5.5	-3.5	330	4.8	2.4	-4.1	45	4.5	-3.2	-3.2	321	0.6	0.4	-0.5	142	1.6	-1.0	1.3	115	6.5	-5.9	2.8	95	9.8	-9.8	0.9			
12	305	7.3	6.0	-4.2	324	4.6	2.7	-3.7	35	4.4	-2.5	-3.6	62	1.7	-1.5	-0.8	135	1.0	-0.7	0.7	112	7.1	-6.6	2.6	103	11.1	-10.8	2.4			
13	310	7.8	6.0	-5.0	317	4.7	3.2	-3.4	31	4.3	-2.2	-3.7	45	0.8	-0.6	-0.6	83	2.6	-2.6	-0.3	88	6.2	-6.2	-0.2	91	13.2	-13.2	0.3			
14	294	7.1	6.5	-2.9	309	3.8	3.0	-2.4	46	3.0	-2.2	-2.1	66	1.0	-0.9	-0.4	81	1.3	-1.3	-0.2	99	6.7	-6.6	1.0	94	13.8	-13.8	1.0			
15	285	6.8	6.6	-1.8	309	4.9	3.8	-3.1	43	2.3	-1.6	-1.7	231	1.4	1.1	0.9	129	1.4	-1.1	0.9	88	7.3	-7.3	-0.3	95	12.2	-12.2	1.0			
16	300	7.5	6.5	-3.8	308	5.0	3.9	-3.1	19	1.8	-0.6	-1.7	262	1.4	1.4	0.2	105	2.3	-2.2	0.6	84	6.0	-6.0	-0.6	100	13.2	-13.0	2.4			
17	299	8.3	7.3	-4.0	308	5.7	4.5	-3.5	27	2.7	-1.2	-2.4	121	0.6	-0.5	0.3	82	1.4	-1.4	-0.2	97	7.6	-7.5	0.9	102	10.2	-10.0	2.1			
18	299	9.0	7.9	-4.4	310	6.0	4.6	-3.9	6	2.0	-0.2	-2.0	315	1.3	0.9	-0.9	105	3.0	-2.9	0.8	81	7.5	-7.4	-1.2	90	11.9	-11.9	0.0			
19	303	9.2	7.7	-5.0	309	6.8	5.3	-4.3	339	3.0	1.1	-2.8	348	2.4	0.5	-2.3	81	1.3	-1.3	-0.2	103	7.2	-7.0	1.6	94	14.4	-14.4	1.0			
20	311	8.0	6.0	-5.3	312	7.2	5.4	-4.8	5	3.5	-0.3	-3.5	332	1.9	0.9	-1.7	74	1.8	-1.7	-0.5	110	6.3	-5.9	2.1	107	12.7	-12.2	3.7			
21	308	8.4	6.6	-5.2	320	6.5	4.2	-5.0	3	2.0	-0.1	-2.0	286	1.8	1.7	-0.5	76	2.1	-2.0	-0.5	98	8.9	-8.8	1.2	99	9.9	-9.8	1.5			
22	309	7.5	5.9	-4.7	314	5.9	4.2	-4.1	38	1.6	-1.0	-1.3	313	1.8	1.3	-1.2	68	1.6	-1.5	-0.6	103	6.1	-5.9	1.4	94	11.0	-11.0	0.7			
23	309	8.0	6.2	-5.0	314	6.4	4.6	-4.5	35	1.6	-0.9	-1.3	273	1.8	1.8	-0.1	225	0.3	0.2	0.2	101	7.7	-7.6	1.5	89	13.6	-13.6	-0.2			
24	302	9.4	8.0	-5.0	309	6.9	5.4	-4.3	34	1.4	-0.8	-1.2	4	1.5	-0.1	-1.5	77	1.7	-1.7	-0.4	98	6.9	-6.8	1.0	96	12.8	-12.7	1.3			
25	296	9.3	8.3	-4.1	308	7.0	5.5	-4.3	360	1.9	0.0	-1.9	321	2.1	1.3	-1.6	86	1.6	-1.6	-0.1	99	10.4	-10.3	1.6	94	15.1	-15.1	1.1			
26	300	7.5	6.5	-3.8	303	6.7	5.6	-3.6	351	1.9	0.3	-1.9	292	1.6	1.5	-0.6	72	2.8	-2.7	-0.9	87	10.4	-10.4	-0.5	89	15.6	-15.6	-0.3			
27	294	8.4	7.7	-3.4	299	7.8	6.8	-3.8	327	2.4	1.3	-2.0	270	1.2	1.2	0.0	86	2.9	-2.9	-0.2	86	8.8	-8.8	-0.6	99	16.2	-16.0	2.6			
28	299	10.0	8.8	-4.8	304	8.5	7.0	-4.8	297	3.5	3.1	-1.6	297	1.1	1.0	-0.5	78	2.9	-2.8	-0.6	91	9.2	-9.2	0.1	95	17.4	-17.3	1.4			
29	300	8.1	7.0	-4.0	307	7.7	6.2	-4.6	306	3.2	2.6	-1.9	285	2.4	2.3	-0.6	88	2.9	-2.9	-0.1	98	8.3	-8.2	1.2	89	18.3	-18.3	-0.4			
30	302	8.4	7.1	-4.4	294	7.0	6.4	-2.9	315	2.0	1.4	-1.4	276	1.0	1.0	-0.1	76	2.1	-2.0	-0.5	91	10.5	-10.5	0.2	88	18.9	-18.9	-0.5			
31	308	9.8	7.8	-6.0	298	6.7	5.9	-3.1	272	3.5	3.5	-0.1	257	1.7	1.7	0.4	67	2.8	-2.6	-1.1	90	9.5	-9.5	0.0	94	19.2	-19.2	1.2			

Daily Normals of Upper Air Winds (1971-2000)

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THIRUVANANTHAPURAM

JUNE

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	299	7.9	6.9	-3.8	299	7.7	6.7	-3.7	283	4.6	4.5	-1.0	272	2.4	2.4	-0.1	67	4.0	-3.7	-1.6	94	11.5	-11.5	0.8	94	23.3	-23.3	1.5			
2	290	6.3	5.9	-2.2	287	8.9	8.5	-2.6	276	5.6	5.6	-0.6	275	1.1	1.1	-0.1	80	5.0	-4.9	-0.9	70	11.2	-10.5	-3.9	90	22.6	-22.6	0.0			
3	291	8.8	8.2	-3.2	292	10.1	9.4	-3.8	285	5.8	5.6	-1.5	265	2.4	2.4	0.2	54	3.7	-3.0	-2.2	91	11.0	-11.0	0.1	91	23.3	-23.3	0.6			
4	288	9.6	9.1	-3.0	288	10.1	9.6	-3.1	280	6.1	6.0	-1.1	270	2.8	2.8	0.0	70	4.4	-4.1	-1.5	82	11.8	-11.7	-1.7	93	24.0	-24.0	1.2			
5	287	9.0	8.6	-2.6	290	10.4	9.8	-3.6	285	8.1	7.8	-2.1	273	3.5	3.5	-0.2	77	5.4	-5.3	-1.2	80	15.1	-14.9	-2.7	93	24.1	-24.1	1.3			
6	284	9.5	9.2	-2.3	288	10.9	10.4	-3.3	278	9.8	9.7	-1.3	261	4.9	4.8	0.8	61	5.3	-4.6	-2.6	83	15.6	-15.5	-2.0	89	20.3	-20.3	-0.3			
7	303	9.8	8.2	-5.4	293	12.1	11.1	-4.7	285	9.8	9.4	-2.6	270	3.5	3.5	0.0	54	6.2	-5.0	-3.6	83	16.5	-16.4	-2.1	92	20.6	-20.6	0.7			
8	297	11.0	9.8	-5.0	295	12.2	11.0	-5.2	288	9.7	9.2	-3.0	285	4.1	4.0	-1.1	65	5.4	-4.9	-2.3	86	15.7	-15.7	-1.2	89	22.8	-22.8	-0.2			
9	297	11.9	10.6	-5.5	298	12.1	10.7	-5.6	287	9.6	9.2	-2.8	293	3.8	3.5	-1.5	67	6.3	-5.8	-2.5	85	16.2	-16.1	-1.4	92	21.7	-21.7	0.7			
10	297	11.4	10.1	-5.2	295	12.1	11.0	-5.1	296	10.1	9.1	-4.4	296	4.1	3.7	-1.8	68	4.8	-4.5	-1.8	86	18.3	-18.3	-1.3	85	24.3	-24.2	-2.0			
11	300	12.2	10.6	-6.0	299	14.3	12.5	-7.0	293	11.2	10.3	-4.4	283	5.2	5.1	-1.2	62	4.2	-3.7	-2.0	81	17.2	-17.0	-2.6	84	25.4	-25.2	-2.8			
12	294	11.5	10.5	-4.7	299	13.2	11.5	-6.5	288	11.5	10.9	-3.6	281	5.1	5.0	-1.0	67	4.0	-3.7	-1.6	78	20.2	-19.8	-4.2	94	21.6	-21.5	1.5			
13	295	11.9	10.8	-5.1	299	13.0	11.4	-6.3	290	12.0	11.3	-4.1	284	5.8	5.6	-1.4	66	5.7	-5.2	-2.3	79	19.4	-19.1	-3.6	88	21.1	-21.1	-0.6			
14	302	12.3	10.5	-6.5	294	13.5	12.3	-5.6	279	12.4	12.3	-1.9	278	5.2	5.2	-0.7	91	5.4	-5.4	0.1	75	19.6	-18.9	-5.0	88	25.0	-25.0	-0.9			
15	298	12.3	10.9	-5.7	290	14.7	13.8	-5.1	278	13.4	13.3	-1.8	276	4.9	4.9	-0.5	67	6.6	-6.1	-2.6	80	18.5	-18.2	-3.2	92	25.4	-25.4	0.7			
16	299	11.8	10.3	-5.7	291	13.3	12.4	-4.7	280	13.0	12.8	-2.3	269	6.4	6.4	0.1	75	6.4	-6.2	-1.7	81	19.1	-18.9	-2.9	87	24.2	-24.2	-1.2			
17	299	12.2	10.7	-5.9	293	14.2	13.1	-5.5	279	13.1	12.9	-2.0	277	4.0	4.0	-0.5	65	6.8	-6.1	-2.9	80	20.8	-20.5	-3.5	81	27.4	-27.1	-4.2			
18	294	11.2	10.3	-4.5	294	14.9	13.6	-6.1	282	12.6	12.3	-2.6	275	4.7	4.7	-0.4	74	7.3	-7.0	-2.0	81	23.2	-22.9	-3.8	87	26.6	-26.6	-1.5			
19	293	10.3	9.5	-4.0	295	14.5	13.1	-6.2	284	14.0	13.6	-3.5	286	6.1	5.9	-1.7	89	6.6	-6.6	-0.1	81	23.0	-22.7	-3.5	87	25.4	-25.4	-1.5			
20	292	11.4	10.6	-4.2	298	14.5	12.8	-6.8	287	13.4	12.8	-4.0	269	4.6	4.6	0.1	75	6.3	-6.1	-1.6	84	23.9	-23.8	-2.5	94	24.1	-24.0	1.7			
21	299	10.7	9.4	-5.2	301	13.7	11.8	-7.0	285	11.7	11.3	-3.0	274	5.2	5.2	-0.4	78	6.8	-6.7	-1.4	83	25.3	-25.1	-3.0	86	25.7	-25.6	-1.7			
22	307	10.3	8.2	-6.2	301	14.0	12.0	-7.3	286	11.7	11.2	-3.3	274	4.5	4.5	-0.3	89	7.3	-7.3	-0.1	83	24.7	-24.5	-2.8	86	25.7	-25.6	-1.9			
23	308	10.4	8.2	-6.4	299	13.6	11.9	-6.6	285	11.6	11.2	-2.9	275	4.6	4.6	-0.4	89	7.0	-7.0	-0.1	81	23.8	-23.5	-3.6	88	28.9	-28.9	-0.8			
24	306	9.7	7.8	-5.7	294	13.7	12.5	-5.6	282	11.9	11.6	-2.5	252	4.6	4.4	1.4	84	7.1	-7.1	-0.8	85	24.2	-24.1	-2.3	90	24.8	-24.8	0.0			
25	312	11.8	8.8	-7.8	298	14.0	12.3	-6.6	286	11.8	11.4	-3.2	275	5.6	5.6	-0.5	70	6.3	-5.9	-2.2	83	24.2	-24.0	-2.9	91	27.1	-27.1	0.6			
26	309	10.7	8.3	-6.7	295	14.0	12.7	-5.8	282	12.6	12.3	-2.7	267	5.5	5.5	0.3	66	5.9	-5.4	-2.4	78	24.6	-24.1	-5.0	90	27.3	-27.3	-0.2			
27	308	11.8	9.3	-7.3	291	14.0	13.0	-5.1	281	12.3	12.1	-2.4	263	5.7	5.7	0.7	76	5.5	-5.3	-1.3	81	25.4	-25.1	-4.2	86	28.3	-28.2	-1.9			
28	301	11.4	9.8	-5.9	295	12.4	11.3	-5.2	281	12.0	11.8	-2.4	277	5.0	5.0	-0.6	81	7.0	-6.9	-1.1	79	23.4	-23.0	-4.4	86	25.7	-25.7	-1.6			
29	300	11.8	10.2	-5.9	295	13.1	11.8	-5.6	282	12.1	11.8	-2.6	278	5.1	5.1	-0.7	95	7.5	-7.5	0.6	83	23.4	-23.2	-2.7	84	25.0	-24.9	-2.7			
30	305	13.7	11.2	-7.9	301	13.9	11.9	-7.2	288	11.9	11.3	-3.6	261	3.6	3.6	0.6	86	7.5	-7.5	-0.5	83	23.8	-23.6	-2.8	85	27.1	-27.0	-2.5			

Daily Normals of Upper Air Winds (1971-2000)

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THIRUVANANTHAPURAM

JULY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	299	13.2	11.5	-6.5	298	13.3	11.7	-6.3	284	12.3	11.9	-3.0	287	2.7	2.6	-0.8	86	8.6	-8.6	-0.6	82	22.8	-22.6	-3.2	91	29.4	-29.4	0.3			
2	305	12.3	10.1	-7.0	302	13.5	11.4	-7.2	285	12.3	11.9	-3.2	272	3.2	3.2	-0.1	92	8.5	-8.5	0.3	83	25.2	-25.0	-3.2	89	29.1	-29.1	-0.7			
3	309	12.4	9.7	-7.8	305	12.6	10.3	-7.2	289	11.2	10.6	-3.6	276	2.7	2.7	-0.3	86	8.3	-8.3	-0.6	82	25.9	-25.6	-3.8	85	24.9	-24.8	-2.1			
4	307	11.7	9.3	-7.1	304	12.3	10.2	-6.9	290	9.7	9.1	-3.3	304	2.7	2.2	-1.5	82	9.3	-9.2	-1.3	84	24.1	-24.0	-2.5	88	24.2	-24.2	-0.8			
5	308	12.3	9.7	-7.5	303	12.6	10.6	-6.8	287	10.1	9.7	-2.9	288	2.9	2.8	-0.9	90	8.2	-8.2	0.0	84	23.3	-23.2	-2.4	88	26.1	-26.1	-0.7			
6	309	12.6	9.8	-7.9	300	12.1	10.5	-6.1	284	9.6	9.3	-2.4	277	2.3	2.3	-0.3	93	9.0	-9.0	0.4	82	24.9	-24.7	-3.4	86	24.3	-24.2	-1.9			
7	313	12.4	9.0	-8.5	301	13.0	11.1	-6.7	282	11.7	11.4	-2.5	265	3.7	3.7	0.3	89	9.3	-9.3	-0.2	81	25.8	-25.5	-4.2	93	26.2	-26.2	1.6			
8	309	11.6	9.0	-7.3	301	13.9	12.0	-7.1	291	11.6	10.8	-4.1	280	2.8	2.8	-0.5	91	9.3	-9.3	0.2	82	24.6	-24.3	-3.5	88	26.4	-26.4	-0.9			
9	307	12.4	9.9	-7.4	303	13.8	11.6	-7.4	292	11.6	10.8	-4.3	270	2.9	2.9	0.0	84	10.1	-10.0	-1.1	80	23.6	-23.3	-4.0	87	25.6	-25.6	-1.4			
10	307	12.4	9.9	-7.4	301	13.8	11.8	-7.2	287	11.0	10.5	-3.3	288	2.5	2.4	-0.8	87	9.0	-9.0	-0.4	82	23.3	-23.1	-3.2	87	23.9	-23.9	-1.1			
11	300	11.3	9.7	-5.7	304	13.9	11.6	-7.7	290	11.3	10.6	-3.8	304	2.7	2.2	-1.5	83	8.4	-8.3	-1.0	81	22.0	-21.8	-3.3	85	25.0	-24.9	-2.3			
12	304	11.8	9.8	-6.5	300	14.3	12.4	-7.1	288	12.3	11.7	-3.9	293	4.6	4.2	-1.8	87	7.0	-7.0	-0.4	80	22.5	-22.2	-3.9	92	28.1	-28.1	0.9			
13	307	12.1	9.6	-7.3	299	13.9	12.1	-6.8	286	12.4	11.9	-3.4	277	4.7	4.7	-0.6	83	7.7	-7.6	-0.9	79	22.3	-21.9	-4.1	84	24.0	-23.9	-2.4			
14	300	14.5	12.5	-7.3	299	14.7	12.8	-7.2	288	10.9	10.4	-3.4	280	4.2	4.1	-0.7	86	8.1	-8.1	-0.6	79	23.1	-22.7	-4.4	82	29.4	-29.1	-3.9			
15	307	12.4	10.0	-7.4	304	14.3	11.8	-8.0	291	12.0	11.2	-4.4	269	4.5	4.5	0.1	85	8.8	-8.8	-0.7	82	24.0	-23.8	-3.3	88	27.3	-27.3	-1.0			
16	300	13.0	11.3	-6.5	302	15.5	13.2	-8.2	288	12.1	11.5	-3.7	301	4.1	3.5	-2.1	91	8.4	-8.4	0.1	82	22.6	-22.4	-3.3	87	24.9	-24.9	-1.2			
17	314	13.7	9.9	-9.4	305	14.8	12.1	-8.6	292	11.8	10.9	-4.4	293	3.3	3.0	-1.3	89	7.6	-7.6	-0.1	83	21.8	-21.7	-2.5	90	23.4	-23.4	0.2			
18	301	11.8	10.1	-6.1	302	14.0	11.9	-7.4	293	10.9	10.0	-4.3	310	3.0	2.3	-1.9	92	8.6	-8.6	0.3	86	25.6	-25.5	-1.7	88	25.4	-25.4	-0.7			
19	309	12.2	9.5	-7.7	305	14.5	11.9	-8.3	288	10.0	9.5	-3.1	294	1.7	1.6	-0.7	106	8.7	-8.4	2.4	86	24.5	-24.5	-1.5	89	24.3	-24.3	-0.3			
20	297	11.5	10.2	-5.3	304	13.9	11.5	-7.8	292	10.2	9.5	-3.8	315	1.6	1.1	-1.1	93	9.1	-9.1	0.5	87	24.2	-24.2	-1.4	89	26.0	-26.0	-0.5			
21	312	12.9	9.6	-8.6	303	13.7	11.5	-7.5	290	10.2	9.6	-3.4	290	2.0	1.9	-0.7	81	8.2	-8.1	-1.3	78	27.1	-26.5	-5.8	84	27.0	-26.8	-3.0			
22	313	11.7	8.6	-8.0	308	13.5	10.6	-8.3	291	10.5	9.8	-3.8	279	3.3	3.3	-0.5	90	9.9	-9.9	0.0	83	25.4	-25.2	-3.0	90	25.8	-25.8	0.0			
23	310	12.3	9.4	-8.0	305	13.1	10.7	-7.5	292	10.6	9.9	-3.9	276	3.0	3.0	-0.3	85	9.3	-9.3	-0.8	84	22.0	-21.9	-2.4	90	29.0	-29.0	-0.2			
24	303	12.5	10.5	-6.8	301	13.3	11.4	-6.8	289	10.5	9.9	-3.4	272	3.6	3.6	-0.1	85	8.3	-8.3	-0.7	82	22.2	-22.0	-2.9	87	29.6	-29.6	-1.6			
25	301	13.6	11.6	-7.1	304	14.7	12.1	-8.3	292	11.3	10.4	-4.3	287	3.4	3.3	-1.0	85	8.0	-8.0	-0.7	85	24.5	-24.4	-2.2	91	27.3	-27.3	0.7			
26	299	13.4	11.7	-6.5	299	12.8	11.2	-6.2	286	10.3	9.9	-2.9	278	3.4	3.4	-0.5	99	9.6	-9.5	1.5	83	25.0	-24.8	-3.1	88	25.7	-25.7	-1.0			
27	300	13.3	11.6	-6.6	305	13.0	10.7	-7.4	285	11.1	10.7	-2.8	289	2.4	2.3	-0.8	83	7.9	-7.8	-1.0	81	25.5	-25.2	-4.0	91	25.4	-25.4	0.3			
28	305	13.6	11.2	-7.8	307	13.0	10.4	-7.8	290	10.9	10.3	-3.7	288	2.8	2.7	-0.9	93	11.3	-11.3	0.5	84	27.3	-27.1	-2.9	91	25.0	-25.0	0.6			
29	305	14.4	11.8	-8.2	304	12.5	10.3	-7.0	288	10.5	10.0	-3.2	280	3.5	3.4	-0.6	97	8.5	-8.4	1.0	83	24.6	-24.4	-3.1	88	26.6	-26.6	-1.1			
30	301	14.0	12.0	-7.2	305	14.2	11.7	-8.1	289	11.0	10.4	-3.5	287	2.8	2.7	-0.8	93	8.5	-8.5	0.5	81	26.8	-26.5	-4.2	92	24.8	-24.8	0.7			
31	306	13.2	10.6	-7.8	301	14.1	12.1	-7.2	284	11.4	11.1	-2.8	266	3.1	3.1	0.2	94	9.2	-9.2	0.6	82	24.1	-23.9	-3.2	91	24.2	-24.2	0.3			

Daily Normals of Upper Air Winds (1971-2000)

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THIRUVANANTHAPURAM

AUGUST

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	308	13.4	10.6	-8.2	303	14.2	11.9	-7.7	284	11.0	10.7	-2.7	282	3.4	3.3	-0.7	86	9.1	-9.1	-0.6	84	26.0	-25.9	-2.7	88	25.0	-25.0	-0.7			
2	313	12.8	9.3	-8.8	307	14.4	11.6	-8.6	286	11.4	11.0	-3.1	279	3.3	3.3	-0.5	97	9.0	-8.9	1.1	79	25.7	-25.2	-4.8	86	26.0	-25.9	-1.9			
3	313	12.6	9.2	-8.6	311	13.9	10.5	-9.1	296	10.2	9.2	-4.4	265	2.2	2.2	0.2	97	11.2	-11.1	1.4	85	26.9	-26.8	-2.3	85	23.1	-23.0	-2.0			
4	315	12.1	8.5	-8.6	311	13.0	9.8	-8.6	292	10.4	9.6	-3.9	254	1.8	1.7	0.5	96	9.5	-9.4	1.0	85	27.2	-27.1	-2.3	86	23.6	-23.5	-1.7			
5	312	11.0	8.2	-7.3	308	12.7	10.0	-7.8	289	9.5	9.0	-3.1	289	2.8	2.6	-0.9	91	10.5	-10.5	0.1	83	27.4	-27.2	-3.1	92	22.3	-22.3	0.8			
6	308	8.7	6.9	-5.3	304	12.5	10.4	-7.0	282	9.4	9.2	-2.0	254	2.6	2.5	0.7	100	9.2	-9.1	1.6	82	26.4	-26.1	-3.8	93	23.5	-23.5	1.2			
7	299	9.3	8.1	-4.5	302	11.3	9.6	-5.9	283	10.4	10.1	-2.3	262	2.9	2.9	0.4	97	9.5	-9.4	1.2	83	24.8	-24.6	-2.9	91	23.5	-23.5	0.5			
8	304	11.5	9.5	-6.5	302	13.3	11.3	-7.0	280	11.6	11.4	-2.1	277	4.2	4.2	-0.5	97	9.0	-8.9	1.1	86	26.4	-26.3	-1.8	86	22.8	-22.8	-1.5			
9	302	10.6	9.0	-5.6	301	13.1	11.2	-6.7	288	11.7	11.1	-3.6	288	3.3	3.1	-1.0	99	8.7	-8.6	1.3	82	28.0	-27.7	-3.9	83	23.4	-23.2	-2.9			
10	310	12.2	9.3	-7.9	300	12.7	11.0	-6.4	285	10.2	9.9	-2.6	287	3.7	3.5	-1.1	91	9.0	-9.0	0.1	84	27.5	-27.3	-2.9	90	21.5	-21.5	0.1			
11	311	9.4	7.1	-6.1	300	12.9	11.2	-6.5	284	9.9	9.6	-2.4	268	3.4	3.4	0.1	90	9.7	-9.7	0.0	78	26.0	-25.4	-5.5	94	22.3	-22.2	1.5			
12	315	11.2	7.9	-8.0	306	13.3	10.8	-7.8	288	10.7	10.2	-3.3	279	3.6	3.6	-0.6	89	8.2	-8.2	-0.1	87	24.3	-24.3	-1.3	90	23.2	-23.2	0.1			
13	313	10.6	7.8	-7.2	305	13.6	11.1	-7.9	284	11.0	10.7	-2.6	288	4.1	3.9	-1.3	99	8.8	-8.7	1.4	83	25.2	-25.0	-3.2	90	26.6	-26.6	-0.1			
14	315	11.3	8.0	-8.0	306	13.0	10.5	-7.6	291	10.7	10.0	-3.9	287	1.7	1.6	-0.5	105	9.0	-8.7	2.3	84	25.9	-25.8	-2.6	88	26.7	-26.7	-0.7			
15	312	10.6	7.9	-7.1	305	13.9	11.4	-7.9	293	10.6	9.8	-4.1	279	2.0	2.0	-0.3	102	10.4	-10.2	2.1	83	23.6	-23.4	-2.8	87	24.5	-24.5	-1.4			
16	306	11.3	9.1	-6.7	306	12.8	10.4	-7.5	291	10.3	9.6	-3.7	283	1.7	1.7	-0.4	98	10.2	-10.1	1.4	85	26.9	-26.8	-2.2	88	28.1	-28.1	-1.1			
17	305	9.5	7.8	-5.4	307	13.1	10.5	-7.8	291	9.2	8.6	-3.3	276	2.0	2.0	-0.2	91	9.5	-9.5	0.2	87	24.7	-24.7	-1.5	91	24.4	-24.4	0.4			
18	313	11.5	8.4	-7.8	307	13.1	10.5	-7.8	291	10.5	9.8	-3.7	264	2.0	2.0	0.2	89	7.6	-7.6	-0.1	85	24.8	-24.7	-2.0	89	28.3	-28.3	-0.3			
19	303	11.1	9.3	-6.0	305	12.7	10.4	-7.3	291	9.7	9.1	-3.5	282	2.9	2.8	-0.6	105	7.7	-7.4	2.0	88	23.9	-23.9	-1.0	91	25.9	-25.9	0.4			
20	307	11.1	8.8	-6.7	306	13.4	10.9	-7.8	291	11.1	10.4	-4.0	276	3.0	3.0	-0.3	96	8.0	-8.0	0.8	87	25.3	-25.3	-1.5	89	27.7	-27.7	-0.7			
21	311	11.3	8.5	-7.5	310	12.6	9.6	-8.1	296	9.4	8.5	-4.1	308	2.8	2.2	-1.7	105	8.6	-8.3	2.2	88	25.0	-25.0	-1.0	91	23.0	-23.0	0.6			
22	308	10.8	8.6	-6.6	310	12.9	9.9	-8.3	296	9.3	8.3	-4.1	301	3.3	2.8	-1.7	100	9.1	-9.0	1.6	87	23.7	-23.7	-1.3	90	25.0	-25.0	0.0			
23	302	11.9	10.1	-6.3	303	12.2	10.2	-6.7	286	10.4	10.0	-2.8	262	1.5	1.5	0.2	91	9.0	-9.0	0.2	82	22.9	-22.7	-3.3	87	20.4	-20.4	-1.0			
24	307	12.7	10.1	-7.7	309	12.0	9.4	-7.5	288	9.9	9.4	-3.1	298	2.4	2.1	-1.1	102	9.6	-9.4	2.0	88	25.1	-25.1	-0.8	90	24.1	-24.1	0.1			
25	305	12.6	10.3	-7.3	306	12.1	9.8	-7.1	291	9.8	9.2	-3.5	288	2.2	2.1	-0.7	96	10.1	-10.1	1.0	85	24.8	-24.7	-2.3	88	21.9	-21.9	-0.6			
26	300	12.6	10.9	-6.4	303	12.3	10.3	-6.7	290	9.6	9.0	-3.2	270	2.2	2.2	0.0	93	9.6	-9.6	0.5	84	25.9	-25.8	-2.5	92	23.4	-23.4	0.8			
27	303	11.9	10.0	-6.5	306	11.4	9.2	-6.8	285	9.2	8.9	-2.4	286	3.7	3.6	-1.0	102	9.5	-9.3	1.9	85	26.8	-26.7	-2.3	94	20.8	-20.8	1.3			
28	304	12.4	10.2	-7.0	302	12.0	10.1	-6.4	287	10.1	9.6	-3.0	287	4.1	3.9	-1.2	106	10.2	-9.8	2.9	87	24.1	-24.1	-1.2	95	17.9	-17.8	1.7			
29	305	11.8	9.7	-6.7	304	11.2	9.2	-6.3	292	9.2	8.6	-3.4	279	3.2	3.2	-0.5	103	9.2	-9.0	2.0	84	24.6	-24.5	-2.6	92	21.2	-21.2	0.9			
30	307	12.1	9.6	-7.3	307	10.7	8.6	-6.4	285	8.7	8.4	-2.2	286	2.6	2.5	-0.7	92	8.7	-8.7	0.3	87	25.5	-25.5	-1.4	89	23.5	-23.5	-0.4			
31	309	12.4	9.6	-7.8	308	10.3	8.1	-6.3	287	6.6	6.3	-1.9	305	1.9	1.6	-1.1	86	8.9	-8.9	-0.6	86	25.9	-25.8	-1.7	89	21.6	-21.6	-0.5			

Daily Normals of Upper Air Winds (1971-2000)

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THIRUVANANTHAPURAM

SEPTEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	307	11.2	9.0	-6.7	310	9.4	7.2	-6.1	287	6.4	6.1	-1.9	288	2.3	2.2	-0.7	95	9.8	-9.8	0.8	85	25.7	-25.6	-2.2	92	20.0	-20.0	0.6			
2	305	11.6	9.6	-6.6	308	9.5	7.5	-5.9	281	6.3	6.2	-1.2	286	1.8	1.7	-0.5	98	11.0	-10.9	1.6	86	26.1	-26.0	-1.9	87	20.9	-20.9	-1.1			
3	307	11.9	9.5	-7.2	308	9.5	7.5	-5.8	282	7.4	7.2	-1.5	275	2.1	2.1	-0.2	103	12.3	-12.0	2.7	89	25.3	-25.3	-0.6	91	20.9	-20.9	0.5			
4	305	10.3	8.5	-5.9	304	9.3	7.7	-5.2	286	7.1	6.8	-2.0	293	1.3	1.2	-0.5	100	10.0	-9.8	1.8	84	24.8	-24.7	-2.6	92	19.0	-19.0	0.5			
5	302	10.9	9.2	-5.8	306	8.8	7.1	-5.2	287	6.4	6.1	-1.9	320	0.8	0.5	-0.6	93	10.2	-10.2	0.6	87	24.4	-24.4	-1.4	92	19.1	-19.1	0.6			
6	302	10.1	8.5	-5.4	306	9.3	7.5	-5.5	291	6.9	6.4	-2.5	309	1.4	1.1	-0.9	98	8.8	-8.7	1.3	88	23.8	-23.8	-1.0	85	19.0	-18.9	-1.6			
7	309	9.2	7.2	-5.8	310	9.1	7.0	-5.8	287	6.3	6.0	-1.8	304	1.8	1.5	-1.0	96	8.6	-8.6	0.9	86	24.2	-24.2	-1.5	91	19.1	-19.1	0.4			
8	302	8.2	7.0	-4.3	306	9.6	7.8	-5.6	290	7.7	7.2	-2.6	292	2.7	2.5	-1.0	99	8.0	-7.9	1.2	87	23.2	-23.2	-1.2	95	17.5	-17.4	1.4			
9	307	8.7	7.0	-5.2	310	9.7	7.5	-6.2	290	8.4	7.9	-2.8	306	2.6	2.1	-1.5	104	7.9	-7.7	1.9	88	21.8	-21.8	-0.9	85	18.8	-18.7	-1.6			
10	312	8.9	6.6	-6.0	306	9.7	7.8	-5.7	293	7.6	7.0	-2.9	288	2.6	2.5	-0.8	108	8.2	-7.8	2.5	88	22.4	-22.4	-0.8	91	19.2	-19.2	0.2			
11	302	7.5	6.3	-4.0	304	8.7	7.2	-4.8	293	6.2	5.7	-2.4	342	0.6	0.2	-0.6	106	7.4	-7.1	2.0	89	20.9	-20.9	-0.4	93	17.9	-17.9	0.9			
12	306	7.4	6.0	-4.3	306	9.1	7.4	-5.3	287	6.5	6.2	-1.9	315	0.6	0.4	-0.4	100	9.5	-9.4	1.6	91	19.8	-19.8	0.2	90	18.0	-18.0	0.1			
13	299	8.3	7.3	-4.0	308	7.3	5.8	-4.5	294	4.4	4.0	-1.8	50	0.8	-0.6	-0.5	100	9.0	-8.9	1.5	88	20.5	-20.5	-0.7	94	17.2	-17.2	1.2			
14	302	9.9	8.4	-5.2	310	7.5	5.8	-4.8	288	5.2	4.9	-1.6	54	0.9	-0.7	-0.5	98	9.3	-9.2	1.3	89	19.3	-19.3	-0.2	93	15.2	-15.2	0.8			
15	295	8.9	8.1	-3.8	307	6.2	5.0	-3.7	301	3.5	3.0	-1.8	17	1.7	-0.5	-1.6	96	8.4	-8.4	0.9	93	18.2	-18.2	1.1	101	15.3	-15.0	3.0			
16	297	9.6	8.6	-4.3	305	7.5	6.1	-4.3	282	4.7	4.6	-1.0	36	0.9	-0.5	-0.7	91	7.8	-7.8	0.2	88	18.9	-18.9	-0.7	91	16.2	-16.2	0.3			
17	299	9.2	8.1	-4.4	301	7.5	6.4	-3.9	284	5.8	5.6	-1.4	360	0.5	0.0	-0.5	101	8.6	-8.5	1.6	94	20.3	-20.2	1.5	92	20.4	-20.4	0.7			
18	312	9.8	7.3	-6.5	299	7.9	6.9	-3.8	279	6.8	6.7	-1.1	333	0.4	0.2	-0.4	92	6.6	-6.6	0.2	88	17.0	-17.0	-0.7	88	17.4	-17.4	-0.7			
19	308	9.0	7.1	-5.6	303	8.0	6.7	-4.3	284	6.4	6.2	-1.6	281	2.1	2.1	-0.4	108	7.5	-7.1	2.3	94	19.6	-19.5	1.4	94	20.0	-20.0	1.4			
20	304	8.5	7.0	-4.8	300	8.8	7.6	-4.4	287	6.5	6.2	-1.9	311	0.9	0.7	-0.6	105	7.9	-7.6	2.1	91	19.0	-19.0	0.2	95	19.0	-18.9	1.7			
21	305	8.6	7.1	-4.9	291	7.9	7.4	-2.9	291	5.8	5.4	-2.1	360	0.8	0.0	-0.8	98	8.6	-8.5	1.2	90	17.4	-17.4	-0.1	95	18.7	-18.6	1.7			
22	297	7.8	7.0	-3.5	292	8.1	7.5	-3.0	293	7.0	6.5	-2.7	291	0.9	0.8	-0.3	100	8.5	-8.4	1.5	89	16.8	-16.8	-0.4	93	19.9	-19.9	0.9			
23	294	8.0	7.3	-3.3	292	8.7	8.1	-3.2	281	6.6	6.5	-1.3	297	0.7	0.6	-0.3	102	8.2	-8.0	1.7	92	19.0	-19.0	0.5	94	16.0	-16.0	1.1			
24	302	7.7	6.5	-4.1	297	8.5	7.6	-3.8	288	6.7	6.4	-2.1	277	1.7	1.7	-0.2	106	9.2	-8.9	2.5	91	20.2	-20.2	0.4	93	18.1	-18.1	0.9			
25	307	5.9	4.7	-3.5	296	7.4	6.7	-3.2	284	5.5	5.3	-1.3	328	0.9	0.5	-0.8	111	7.7	-7.2	2.8	92	17.4	-17.4	0.7	97	15.6	-15.5	1.9			
26	305	5.4	4.4	-3.1	292	7.2	6.7	-2.7	271	5.0	5.0	-0.1	203	0.8	0.3	0.7	104	7.6	-7.4	1.8	85	18.2	-18.1	-1.7	93	17.2	-17.2	0.9			
27	288	8.7	8.3	-2.7	293	7.8	7.2	-3.1	278	6.2	6.1	-0.9	256	0.4	0.4	0.1	96	7.6	-7.6	0.8	86	18.9	-18.8	-1.4	94	16.1	-16.1	1.1			
28	296	7.9	7.1	-3.4	299	7.7	6.8	-3.7	290	6.6	6.2	-2.2	264	2.0	2.0	0.2	99	8.0	-7.9	1.2	81	18.2	-18.0	-2.7	87	15.3	-15.3	-0.7			
29	302	8.4	7.1	-4.5	304	6.4	5.3	-3.6	288	6.4	6.1	-2.0	287	1.0	1.0	-0.3	90	6.8	-6.8	0.0	84	17.7	-17.6	-1.8	92	14.8	-14.8	0.6			
30	300	6.8	5.9	-3.4	297	6.1	5.4	-2.8	279	6.0	5.9	-0.9	274	2.7	2.7	-0.2	89	6.0	-6.0	-0.1	86	17.7	-17.7	-1.1	90	13.9	-13.9	0.0			

Daily Normals of Upper Air Winds (1971-2000)

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THIRUVANANTHAPURAM

OCTOBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	298	5.9	5.2	-2.8	289	6.5	6.1	-2.1	270	6.6	6.6	0.0	278	2.8	2.8	-0.4	99	6.0	-5.9	0.9	83	18.3	-18.2	-2.3	92	12.6	-12.6	0.5			
2	287	5.0	4.8	-1.5	289	6.8	6.4	-2.2	279	6.4	6.3	-1.0	262	3.4	3.4	0.5	98	6.3	-6.2	0.9	90	17.0	-17.0	0.1	84	10.4	-10.3	-1.1			
3	297	7.0	6.2	-3.2	297	8.3	7.4	-3.8	281	7.3	7.2	-1.4	261	1.8	1.8	0.3	101	7.8	-7.7	1.5	85	18.9	-18.8	-1.6	92	13.1	-13.1	0.4			
4	295	7.2	6.5	-3.0	293	6.3	5.8	-2.5	282	5.7	5.6	-1.2	276	2.0	2.0	-0.2	90	6.5	-6.5	0.0	93	17.5	-17.5	0.8	94	13.0	-13.0	0.9			
5	299	9.1	8.0	-4.4	290	6.9	6.5	-2.4	281	5.2	5.1	-1.0	301	0.6	0.5	-0.3	101	6.3	-6.2	1.2	85	17.1	-17.0	-1.5	90	11.7	-11.7	0.1			
6	294	6.8	6.2	-2.8	301	6.4	5.5	-3.3	286	5.5	5.3	-1.5	267	2.2	2.2	0.1	108	7.5	-7.1	2.3	85	16.8	-16.7	-1.4	88	11.7	-11.7	-0.4			
7	299	7.8	6.8	-3.8	303	6.7	5.6	-3.6	291	5.0	4.7	-1.8	297	1.1	1.0	-0.5	97	6.1	-6.1	0.7	86	14.5	-14.5	-0.9	85	12.7	-12.7	-1.1			
8	290	4.9	4.6	-1.7	293	4.8	4.4	-1.9	288	4.4	4.2	-1.4	51	0.6	-0.5	-0.4	100	6.2	-6.1	1.1	89	16.0	-16.0	-0.2	92	12.6	-12.6	0.4			
9	269	4.8	4.8	0.1	285	4.7	4.5	-1.2	294	3.6	3.3	-1.5	127	1.0	-0.8	0.6	94	6.1	-6.1	0.4	89	15.2	-15.2	-0.3	90	12.1	-12.1	0.1			
10	277	4.3	4.3	-0.5	286	4.4	4.2	-1.2	289	2.8	2.6	-0.9	131	0.9	-0.7	0.6	106	7.1	-6.8	2.0	82	14.3	-14.2	-1.9	90	11.9	-11.9	-0.1			
11	266	5.4	5.4	0.4	278	4.1	4.1	-0.6	282	2.5	2.4	-0.5	76	1.6	-1.6	-0.4	103	7.6	-7.4	1.7	90	14.0	-14.0	-0.1	91	12.8	-12.8	0.3			
12	277	5.0	5.0	-0.6	293	2.6	2.4	-1.0	300	2.0	1.7	-1.0	29	1.3	-0.6	-1.1	101	6.7	-6.6	1.3	88	12.7	-12.7	-0.5	88	10.7	-10.7	-0.4			
13	292	3.7	3.4	-1.4	302	3.1	2.6	-1.6	300	2.0	1.7	-1.0	42	1.2	-0.8	-0.9	90	5.3	-5.3	0.0	84	13.6	-13.5	-1.4	92	8.5	-8.5	0.3			
14	297	6.8	6.1	-3.1	312	4.0	3.0	-2.7	306	3.4	2.8	-2.0	301	0.6	0.5	-0.3	96	5.8	-5.8	0.6	87	15.1	-15.1	-0.7	89	10.0	-10.0	-0.2			
15	287	5.4	5.2	-1.6	320	3.3	2.1	-2.5	309	3.3	2.6	-2.1	22	1.8	-0.7	-1.7	101	5.4	-5.3	1.0	90	14.9	-14.9	-0.1	95	10.7	-10.7	1.0			
16	308	7.0	5.5	-4.3	305	4.5	3.7	-2.6	305	4.9	4.0	-2.8	326	0.7	0.4	-0.6	100	5.3	-5.2	0.9	94	13.7	-13.7	0.9	88	11.4	-11.4	-0.3			
17	286	5.3	5.1	-1.5	307	4.3	3.4	-2.6	298	4.3	3.8	-2.0	225	0.3	0.2	0.2	99	6.1	-6.0	0.9	100	13.3	-13.1	2.3	97	10.9	-10.8	1.4			
18	283	6.6	6.4	-1.5	307	4.3	3.4	-2.6	295	4.2	3.8	-1.8	106	0.7	-0.7	0.2	105	7.4	-7.2	1.9	95	12.2	-12.2	1.0	96	11.9	-11.8	1.3			
19	291	5.1	4.8	-1.8	315	2.8	2.0	-2.0	303	2.7	2.3	-1.5	106	1.9	-1.8	0.5	100	7.4	-7.3	1.3	93	13.4	-13.4	0.7	86	10.7	-10.7	-0.8			
20	300	4.4	3.8	-2.2	334	2.8	1.2	-2.5	344	1.8	0.5	-1.7	117	1.6	-1.4	0.7	99	5.4	-5.3	0.8	98	10.3	-10.2	1.4	101	9.1	-8.9	1.8			
21	278	2.9	2.9	-0.4	352	1.5	0.2	-1.5	8	0.7	-0.1	-0.7	95	2.3	-2.3	0.2	106	6.1	-5.9	1.7	93	12.1	-12.1	0.6	93	10.4	-10.4	0.6			
22	288	4.3	4.1	-1.3	357	2.0	0.1	-2.0	326	1.1	0.6	-0.9	77	1.3	-1.3	-0.3	90	5.0	-5.0	0.0	93	11.2	-11.2	0.6	94	8.0	-8.0	0.5			
23	309	2.8	2.2	-1.8	353	2.3	0.3	-2.3	329	1.7	0.9	-1.5	84	1.8	-1.8	-0.2	95	5.7	-5.7	0.5	98	11.4	-11.3	1.5	102	8.2	-8.0	1.7			
24	299	2.6	2.3	-1.3	351	1.8	0.3	-1.8	7	0.8	-0.1	-0.8	84	1.9	-1.9	-0.2	101	6.0	-5.9	1.1	97	11.0	-10.9	1.3	97	9.6	-9.5	1.2			
25	313	2.6	1.9	-1.8	360	1.3	0.0	-1.3	10	1.1	-0.2	-1.1	87	2.0	-2.0	-0.1	87	5.9	-5.9	-0.3	92	10.2	-10.2	0.3	107	8.7	-8.3	2.6			
26	308	3.9	3.1	-2.4	341	2.1	0.7	-2.0	349	1.5	0.3	-1.5	65	1.9	-1.7	-0.8	93	4.3	-4.3	0.2	95	9.7	-9.7	0.8	77	4.7	-4.6	-1.1			
27	300	3.4	2.9	-1.7	337	0.8	0.3	-0.7	5	1.1	-0.1	-1.1	72	1.6	-1.5	-0.5	99	5.9	-5.8	0.9	92	11.3	-11.3	0.3	87	7.6	-7.6	-0.4			
28	305	3.3	2.7	-1.9	6	1.0	-0.1	-1.0	336	1.0	0.4	-0.9	79	2.0	-2.0	-0.4	93	5.4	-5.4	0.3	99	10.8	-10.7	1.7	94	7.8	-7.8	0.6			
29	298	2.4	2.1	-1.1	335	2.1	0.9	-1.9	321	2.1	1.3	-1.6	35	1.2	-0.7	-1.0	97	4.9	-4.9	0.6	99	9.9	-9.8	1.6	88	9.0	-9.0	-0.3			
30	306	3.9	3.2	-2.3	331	2.5	1.2	-2.2	299	2.1	1.8	-1.0	53	1.5	-1.2	-0.9	105	4.7	-4.5	1.2	100	8.4	-8.3	1.5	103	7.4	-7.2	1.6			
31	285	4.2	4.1	-1.1	344	1.9	0.5	-1.8	304	1.8	1.5	-1.0	87	1.8	-1.8	-0.1	106	5.2	-5.0	1.4	104	9.7	-9.4	2.3	91	7.0	-7.0	0.1			

Daily Normals of Upper Air Winds (1971-2000)

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THIRUVANANTHAPURAM

NOVEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	279	3.3	3.3	-0.5	357	1.9	0.1	-1.9	328	0.9	0.5	-0.8	63	1.8	-1.6	-0.8	99	5.5	-5.4	0.9	98	9.6	-9.5	1.3	86	6.4	-6.4	-0.5			
2	293	3.3	3.0	-1.3	348	1.9	0.4	-1.9	304	1.8	1.5	-1.0	84	1.0	-1.0	-0.1	91	5.8	-5.8	0.1	102	9.3	-9.1	1.9	92	8.5	-8.5	0.3			
3	297	3.0	2.7	-1.4	317	1.9	1.3	-1.4	280	2.3	2.3	-0.4	98	0.7	-0.7	0.1	113	6.1	-5.6	2.4	104	10.7	-10.4	2.6	97	8.3	-8.2	1.0			
4	296	3.7	3.3	-1.6	347	2.6	0.6	-2.5	318	1.3	0.9	-1.0	62	1.7	-1.5	-0.8	112	5.4	-5.0	2.0	111	10.2	-9.5	3.7	103	9.2	-9.0	2.0			
5	326	2.9	1.6	-2.4	3	1.8	-0.1	-1.8	342	0.9	0.3	-0.9	87	2.1	-2.1	-0.1	101	5.1	-5.0	1.0	88	10.7	-10.7	-0.3	96	8.6	-8.6	0.9			
6	312	2.4	1.8	-1.6	331	1.0	0.5	-0.9	349	0.5	0.1	-0.5	90	1.5	-1.5	0.0	97	4.8	-4.8	0.6	106	11.8	-11.3	3.3	102	8.4	-8.2	1.7			
7	309	1.4	1.1	-0.9	11	1.6	-0.3	-1.6	318	1.2	0.8	-0.9	57	2.0	-1.7	-1.1	99	5.9	-5.8	0.9	101	12.0	-11.8	2.3	88	5.4	-5.4	-0.2			
8	297	1.3	1.2	-0.6	6	1.8	-0.2	-1.8	340	2.0	0.7	-1.9	65	1.7	-1.5	-0.7	93	6.7	-6.7	0.4	108	11.7	-11.1	3.6	92	7.5	-7.5	0.2			
9	241	1.8	1.6	0.9	343	1.7	0.5	-1.6	298	1.5	1.3	-0.7	99	2.6	-2.6	0.4	99	4.3	-4.2	0.7	106	9.7	-9.3	2.6	99	6.9	-6.8	1.1			
10	284	1.6	1.6	-0.4	8	2.2	-0.3	-2.2	323	1.5	0.9	-1.2	81	3.1	-3.1	-0.5	100	5.5	-5.4	1.0	108	10.9	-10.4	3.4	92	5.3	-5.3	0.2			
11	309	2.6	2.0	-1.6	27	2.0	-0.9	-1.8	360	1.5	0.0	-1.5	96	2.0	-2.0	0.2	94	6.4	-6.4	0.5	98	10.8	-10.7	1.5	93	6.2	-6.2	0.3			
12	279	2.5	2.5	-0.4	326	1.1	0.6	-0.9	353	0.8	0.1	-0.8	45	2.5	-1.8	-1.8	102	5.0	-4.9	1.0	107	9.8	-9.4	2.9	116	5.7	-5.1	2.5			
13	309	1.4	1.1	-0.9	19	2.4	-0.8	-2.3	14	1.2	-0.3	-1.2	75	2.3	-2.2	-0.6	99	5.6	-5.5	0.9	112	11.2	-10.4	4.1	107	7.2	-6.9	2.1			
14	256	2.1	2.0	0.5	32	2.2	-1.2	-1.9	360	1.9	0.0	-1.9	82	3.5	-3.5	-0.5	104	7.5	-7.3	1.8	106	10.2	-9.8	2.9	96	6.7	-6.7	0.7			
15	294	2.7	2.5	-1.1	5	2.3	-0.2	-2.3	301	0.6	0.5	-0.3	94	2.8	-2.8	0.2	111	4.8	-4.5	1.7	104	9.9	-9.6	2.4	86	7.8	-7.8	-0.5			
16	270	1.4	1.4	0.0	31	2.6	-1.3	-2.2	333	0.4	0.2	-0.4	82	2.9	-2.9	-0.4	106	6.0	-5.8	1.7	115	9.7	-8.8	4.1	85	6.8	-6.8	-0.6			
17	230	0.8	0.6	0.5	37	2.1	-1.3	-1.7	65	1.4	-1.3	-0.6	88	2.7	-2.7	-0.1	109	6.0	-5.7	2.0	114	9.0	-8.2	3.7	89	7.9	-7.9	-0.1			
18	318	1.2	0.8	-0.9	42	2.8	-1.9	-2.1	45	1.8	-1.3	-1.3	79	3.2	-3.1	-0.6	112	5.2	-4.8	1.9	117	8.9	-7.9	4.0	100	5.9	-5.8	1.0			
19	317	1.9	1.3	-1.4	37	2.0	-1.2	-1.6	97	0.8	-0.8	0.1	82	2.7	-2.7	-0.4	109	4.2	-4.0	1.4	125	8.2	-6.7	4.7	101	5.6	-5.5	1.1			
20	317	2.5	1.7	-1.8	22	2.2	-0.8	-2.0	333	0.2	0.1	-0.2	68	2.2	-2.0	-0.8	113	4.4	-4.1	1.7	126	9.0	-7.3	5.3	102	7.5	-7.3	1.6			
21	329	1.2	0.6	-1.0	23	2.5	-1.0	-2.3	339	2.6	0.9	-2.4	66	2.7	-2.5	-1.1	113	3.6	-3.3	1.4	120	7.8	-6.7	3.9	95	7.5	-7.5	0.7			
22	14	0.8	-0.2	-0.8	39	3.2	-2.0	-2.5	20	1.5	-0.5	-1.4	58	2.6	-2.2	-1.4	104	3.4	-3.3	0.8	128	7.8	-6.1	4.8	115	6.5	-5.9	2.7			
23	72	0.6	-0.6	-0.2	49	2.8	-2.1	-1.8	39	1.4	-0.9	-1.1	55	3.7	-3.0	-2.1	107	3.7	-3.5	1.1	126	6.4	-5.2	3.8	88	5.5	-5.5	-0.2			
24	328	0.9	0.5	-0.8	42	3.0	-2.0	-2.2	18	1.9	-0.6	-1.8	57	3.0	-2.5	-1.6	114	3.4	-3.1	1.4	132	6.4	-4.7	4.3	112	6.1	-5.6	2.3			
25	356	1.6	0.1	-1.6	28	1.7	-0.8	-1.5	346	1.2	0.3	-1.2	95	3.5	-3.5	0.3	106	3.7	-3.6	1.0	120	6.1	-5.3	3.1	109	4.6	-4.3	1.5			
26	318	1.2	0.8	-0.9	29	2.9	-1.4	-2.5	54	1.4	-1.1	-0.8	82	4.3	-4.3	-0.6	102	5.3	-5.2	1.1	113	8.5	-7.8	3.3	88	5.0	-5.0	-0.2			
27	299	1.0	0.9	-0.5	43	3.7	-2.5	-2.7	49	1.8	-1.4	-1.2	66	5.5	-5.0	-2.2	84	3.6	-3.6	-0.4	127	6.9	-5.5	4.1	101	5.6	-5.5	1.1			
28	301	1.2	1.0	-0.6	31	3.5	-1.8	-3.0	39	2.2	-1.4	-1.7	61	4.8	-4.2	-2.3	103	4.1	-4.0	0.9	137	7.0	-4.8	5.1	90	5.1	-5.1	0.0			
29	309	1.9	1.5	-1.2	43	3.5	-2.4	-2.6	53	3.1	-2.5	-1.9	75	4.8	-4.6	-1.2	119	3.5	-3.1	1.7	131	8.9	-6.7	5.9	87	3.5	-3.5	-0.2			
30	336	1.7	0.7	-1.6	45	3.5	-2.5	-2.5	61	2.9	-2.5	-1.4	67	6.9	-6.3	-2.7	90	4.6	-4.6	0.0	138	6.1	-4.1	4.5	98	5.9	-5.8	0.8			

Daily Normals of Upper Air Winds (1971-2000)

396

THIRUVANANTHAPURAM

DECEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	4	1.4	-0.1	-1.4	48	4.6	-3.4	-3.1	63	2.8	-2.5	-1.3	85	5.9	-5.9	-0.5	105	5.5	-5.3	1.4	133	7.2	-5.3	4.9	119	5.0	-4.4	2.4			
2	110	1.2	-1.1	0.4	56	3.6	-3.0	-2.0	87	3.8	-3.8	-0.2	84	6.6	-6.6	-0.7	119	5.2	-4.6	2.5	151	8.7	-4.2	7.6	130	2.6	-2.0	1.7			
3	337	2.1	0.8	-1.9	55	3.8	-3.1	-2.2	64	3.9	-3.5	-1.7	82	5.3	-5.3	-0.7	109	6.7	-6.3	2.2	126	9.1	-7.3	5.4	96	5.0	-5.0	0.5			
4	321	1.9	1.2	-1.5	45	4.0	-2.8	-2.8	71	3.6	-3.4	-1.2	76	5.0	-4.9	-1.2	131	4.8	-3.6	3.1	138	6.6	-4.4	4.9	75	2.4	-2.3	-0.6			
5	360	0.6	0.0	-0.6	39	3.8	-2.4	-3.0	34	2.2	-1.2	-1.8	74	5.0	-4.8	-1.4	126	3.4	-2.8	2.0	138	6.4	-4.3	4.7	101	6.6	-6.5	1.3			
6	330	2.4	1.2	-2.1	40	3.5	-2.3	-2.7	50	1.6	-1.2	-1.0	72	4.2	-4.0	-1.3	110	4.0	-3.8	1.4	126	10.2	-8.3	6.0	86	6.8	-6.8	-0.5			
7	10	1.1	-0.2	-1.1	50	3.0	-2.3	-1.9	61	2.1	-1.8	-1.0	87	3.6	-3.6	-0.2	121	3.1	-2.7	1.6	144	5.9	-3.5	4.8	99	3.8	-3.8	0.6			
8	254	0.7	0.7	0.2	56	2.5	-2.1	-1.4	42	1.5	-1.0	-1.1	77	3.2	-3.1	-0.7	129	3.2	-2.5	2.0	150	6.1	-3.1	5.3	87	1.7	-1.7	-0.1			
9	327	3.0	1.6	-2.5	44	3.0	-2.1	-2.2	45	2.0	-1.4	-1.4	86	3.1	-3.1	-0.2	117	2.8	-2.5	1.3	144	5.3	-3.1	4.3	107	6.8	-6.5	2.0			
10	270	0.6	0.6	0.0	59	2.6	-2.2	-1.3	54	1.7	-1.4	-1.0	82	4.4	-4.4	-0.6	111	4.0	-3.7	1.4	144	7.2	-4.2	5.8	101	5.1	-5.0	1.0			
11	153	0.7	-0.3	0.6	60	3.9	-3.4	-2.0	72	4.6	-4.4	-1.4	89	5.1	-5.1	-0.1	124	5.3	-4.4	3.0	151	6.8	-3.3	6.0	104	6.4	-6.2	1.5			
12	60	1.4	-1.2	-0.7	59	4.4	-3.8	-2.3	81	3.9	-3.9	-0.6	83	6.5	-6.5	-0.8	138	3.6	-2.4	2.7	148	5.7	-3.0	4.8	111	4.8	-4.5	1.7			
13	90	0.9	-0.9	0.0	61	4.5	-3.9	-2.2	84	3.8	-3.8	-0.4	81	5.9	-5.8	-0.9	135	2.4	-1.7	1.7	162	5.6	-1.7	5.3	125	3.2	-2.6	1.8			
14	360	1.3	0.0	-1.3	42	4.5	-3.0	-3.3	68	3.5	-3.2	-1.3	72	5.7	-5.4	-1.8	119	2.1	-1.8	1.0	192	5.6	1.2	5.5	128	2.4	-1.9	1.5			
15	344	0.7	0.2	-0.7	46	4.0	-2.9	-2.8	79	3.2	-3.1	-0.6	85	4.7	-4.7	-0.4	183	1.7	0.1	1.7	188	5.5	0.8	5.4	124	2.7	-2.2	1.5			
16	47	1.9	-1.4	-1.3	55	4.5	-3.7	-2.6	80	4.2	-4.1	-0.7	74	5.9	-5.7	-1.6	151	2.3	-1.1	2.0	196	7.8	2.2	7.5	115	5.0	-4.5	2.1			
17	72	0.3	-0.3	-0.1	49	4.8	-3.6	-3.1	75	4.9	-4.7	-1.3	72	6.1	-5.8	-1.9	144	2.2	-1.3	1.8	173	7.2	-0.9	7.1	76	3.3	-3.2	-0.8			
18	6	0.9	-0.1	-0.9	65	5.0	-4.5	-2.1	83	3.9	-3.9	-0.5	60	5.1	-4.4	-2.5	126	3.1	-2.5	1.8	173	6.1	-0.7	6.1	110	1.2	-1.1	0.4			
19	360	1.4	0.0	-1.4	56	4.0	-3.3	-2.2	72	4.1	-3.9	-1.3	80	5.5	-5.4	-1.0	150	3.0	-1.5	2.6	159	7.0	-2.5	6.5	124	0.4	-0.3	0.2			
20	63	0.9	-0.8	-0.4	54	4.2	-3.4	-2.5	67	3.4	-3.1	-1.3	65	4.7	-4.2	-2.0	157	3.6	-1.4	3.3	180	6.2	0.0	6.2	315	0.1	0.1	-0.1			
21	333	0.7	0.3	-0.6	51	4.3	-3.3	-2.7	59	3.5	-3.0	-1.8	78	6.4	-6.3	-1.3	154	3.4	-1.5	3.1	193	5.3	1.2	5.2	117	0.7	-0.6	0.3			
22	207	0.2	0.1	0.2	56	4.8	-4.0	-2.7	70	3.5	-3.3	-1.2	65	3.8	-3.5	-1.6	190	2.3	0.4	2.3	188	6.2	0.9	6.1	192	3.5	0.7	3.4			
23	51	0.6	-0.5	-0.4	46	3.9	-2.8	-2.7	75	3.0	-2.9	-0.8	74	4.4	-4.2	-1.2	197	1.4	0.4	1.3	190	5.9	1.0	5.8	222	1.2	0.8	0.9			
24	342	0.3	0.1	-0.3	49	4.1	-3.1	-2.7	77	2.7	-2.6	-0.6	86	2.9	-2.9	-0.2	176	2.8	-0.2	2.8	191	6.0	1.2	5.9	111	0.9	-0.8	0.3			
25	353	0.8	0.1	-0.8	52	4.6	-3.6	-2.8	88	3.4	-3.4	-0.1	80	3.5	-3.4	-0.6	195	3.0	0.8	2.9	208	7.8	3.7	6.9	193	2.3	0.5	2.2			
26	351	1.3	0.2	-1.3	49	3.8	-2.9	-2.5	65	2.1	-1.9	-0.9	79	4.2	-4.1	-0.8	148	2.2	-1.2	1.9	186	8.1	0.8	8.1	171	0.6	-0.1	0.6			
27	16	1.9	-0.5	-1.8	46	3.6	-2.6	-2.5	72	2.3	-2.2	-0.7	74	5.2	-5.0	-1.4	128	4.2	-3.3	2.6	188	7.3	1.0	7.2	99	1.2	-1.2	0.2			
28	326	1.8	1.0	-1.5	50	3.5	-2.7	-2.3	77	2.2	-2.1	-0.5	83	4.1	-4.1	-0.5	160	3.0	-1.0	2.8	170	6.2	-1.1	6.1	117	4.2	-3.7	1.9			
29	77	1.3	-1.3	-0.3	48	3.9	-2.9	-2.6	82	3.0	-3.0	-0.4	85	6.6	-6.6	-0.6	140	3.1	-2.0	2.4	164	8.4	-2.3	8.1	127	3.5	-2.8	2.1			
30	32	1.3	-0.7	-1.1	46	3.5	-2.5	-2.4	84	2.7	-2.7	-0.3	69	5.3	-4.9	-1.9	137	2.2	-1.5	1.6	170	7.8	-1.4	7.7	87	3.3	-3.3	-0.2			
31	149	0.6	-0.3	0.5	54	3.9	-3.2	-2.3	81	3.9	-3.9	-0.6	70	6.2	-5.8	-2.1	128	2.4	-1.9	1.5	183	6.6	0.4	6.6	109	4.2	-4.0	1.4			

Daily Normals of Upper Air Winds (1971-2000)

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VISAKHAPATANAM

JANUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	61	5.3	-4.6	-2.6	353	3.4	0.4	-3.4	303	4.9	4.1	-2.7	274	10.1	10.1	-0.7	270	20.6	20.6	0.0	253	23.1	22.1	6.7	279	3.9	3.9	-0.6			
2	51	4.1	-3.2	-2.6	347	4.0	0.9	-3.9	308	5.3	4.2	-3.3	279	10.5	10.4	-1.7	269	20.8	20.8	0.3	261	20.4	20.2	3.1	243	7.3	6.5	3.3			
3	53	4.0	-3.2	-2.4	360	4.4	0.0	-4.4	318	4.2	2.8	-3.1	279	9.3	9.2	-1.5	264	17.5	17.4	1.7	260	20.3	20.0	3.7	237	6.9	5.8	3.8			
4	49	4.0	-3.0	-2.6	1	5.1	-0.1	-5.1	326	3.4	1.9	-2.8	284	9.0	8.7	-2.2	266	17.3	17.3	1.1	253	21.2	20.3	6.1	273	7.7	7.7	-0.4			
5	63	3.9	-3.5	-1.8	356	4.1	0.3	-4.1	299	3.3	2.9	-1.6	278	9.3	9.2	-1.3	260	18.3	18.0	3.3	250	20.9	19.7	7.1	230	12.3	9.4	7.9			
6	65	3.1	-2.8	-1.3	358	3.0	0.1	-3.0	297	3.4	3.0	-1.5	272	9.5	9.5	-0.4	254	19.4	18.6	5.4	245	20.9	19.0	8.7	253	12.5	11.9	3.7			
7	57	4.4	-3.7	-2.4	352	3.6	0.5	-3.6	290	3.7	3.5	-1.3	276	11.4	11.3	-1.2	265	24.3	24.2	2.0	253	22.6	21.6	6.6	239	8.0	6.9	4.1			
8	72	2.9	-2.8	-0.9	4	2.9	-0.2	-2.9	286	3.7	3.6	-1.0	269	9.6	9.6	0.2	261	20.1	19.8	3.3	254	23.1	22.2	6.3	251	14.6	13.8	4.8			
9	71	3.1	-2.9	-1.0	16	2.2	-0.6	-2.1	282	3.5	3.4	-0.7	269	11.6	11.6	0.2	260	21.7	21.4	3.8	253	21.0	20.1	6.2	266	12.0	12.0	0.8			
10	74	3.2	-3.1	-0.9	11	4.1	-0.8	-4.0	294	3.5	3.2	-1.4	266	12.0	12.0	0.8	262	20.9	20.7	2.8	253	21.9	20.9	6.4	254	12.1	11.6	3.3			
11	81	2.5	-2.5	-0.4	13	2.2	-0.5	-2.1	266	2.7	2.7	0.2	265	12.0	11.9	1.1	258	20.7	20.2	4.4	249	22.9	21.3	8.3	259	14.1	13.8	2.8			
12	87	1.7	-1.7	-0.1	351	2.4	0.4	-2.4	283	4.1	4.0	-0.9	264	11.4	11.3	1.2	256	22.7	22.0	5.4	247	24.4	22.4	9.6	263	12.2	12.1	1.4			
13	107	2.1	-2.0	0.6	9	2.5	-0.4	-2.5	279	4.3	4.2	-0.7	279	11.4	11.3	-1.8	264	24.3	24.2	2.4	255	25.6	24.7	6.7	269	11.3	11.3	0.2			
14	99	1.2	-1.2	0.2	5	2.5	-0.2	-2.5	296	3.7	3.3	-1.6	272	12.3	12.3	-0.5	265	25.0	24.9	2.0	261	24.7	24.4	4.0	262	6.1	6.0	0.8			
15	166	0.4	-0.1	0.4	353	1.7	0.2	-1.7	280	4.2	4.1	-0.7	275	13.3	13.2	-1.2	267	25.0	25.0	1.1	258	25.6	25.0	5.5	236	5.9	4.9	3.3			
16	197	1.0	0.3	1.0	351	1.8	0.3	-1.8	293	5.1	4.7	-2.0	276	12.7	12.6	-1.4	270	24.0	24.0	0.0	256	25.6	24.8	6.2	264	6.3	6.3	0.7			
17	38	2.4	-1.5	-1.9	360	2.9	0.0	-2.9	303	4.2	3.5	-2.3	277	13.7	13.6	-1.7	270	22.1	22.1	-0.1	259	21.1	20.7	4.0	272	16.3	16.3	-0.5			
18	86	1.4	-1.4	-0.1	351	3.6	0.6	-3.6	302	4.9	4.2	-2.6	274	13.0	13.0	-0.8	266	21.7	21.6	1.5	257	21.2	20.7	4.7	268	14.5	14.5	0.6			
19	81	0.6	-0.6	-0.1	350	3.5	0.6	-3.4	297	5.6	5.0	-2.5	275	13.1	13.1	-1.1	267	22.4	22.4	1.1	256	21.4	20.8	5.0	250	14.6	13.8	4.9			
20	185	1.1	0.1	1.1	356	3.1	0.2	-3.1	306	5.2	4.2	-3.0	286	11.2	10.8	-3.1	264	21.9	21.8	2.3	255	20.3	19.6	5.4	241	8.5	7.4	4.1			
21	124	0.7	-0.6	0.4	354	2.8	0.3	-2.8	302	5.2	4.4	-2.7	272	12.0	12.0	-0.5	266	20.7	20.6	1.6	257	23.6	23.0	5.2	253	11.8	11.3	3.4			
22	90	1.7	-1.7	0.0	352	2.9	0.4	-2.9	306	5.6	4.5	-3.3	286	11.8	11.4	-3.2	269	20.2	20.2	0.5	251	21.7	20.5	7.1	261	11.2	11.1	1.8			
23	153	0.9	-0.4	0.8	347	3.2	0.7	-3.1	311	5.2	3.9	-3.4	279	11.2	11.1	-1.8	266	19.5	19.5	1.2	255	20.3	19.7	5.1	231	9.0	7.0	5.7			
24	80	1.7	-1.7	-0.3	360	3.6	0.0	-3.6	325	5.0	2.9	-4.1	274	12.6	12.6	-0.9	271	20.7	20.7	-0.2	254	21.8	21.0	6.0	241	7.7	6.7	3.7			
25	59	1.7	-1.5	-0.9	6	3.6	-0.4	-3.6	329	4.3	2.2	-3.7	280	10.0	9.9	-1.7	275	18.5	18.4	-1.7	254	21.6	20.8	5.8	249	9.4	8.8	3.4			
26	76	2.5	-2.4	-0.6	8	4.5	-0.6	-4.5	329	4.1	2.1	-3.5	286	9.7	9.3	-2.6	271	19.2	19.2	-0.3	258	18.8	18.4	4.0	216	5.7	3.4	4.6			
27	64	4.6	-4.1	-2.0	5	3.4	-0.3	-3.4	317	4.0	2.7	-2.9	279	10.6	10.5	-1.7	262	18.7	18.5	2.7	245	20.6	18.6	8.8	236	10.0	8.3	5.6			
28	83	3.1	-3.1	-0.4	7	3.2	-0.4	-3.2	329	4.7	2.4	-4.0	280	10.3	10.1	-1.8	269	17.7	17.7	0.4	250	19.2	18.0	6.7	244	7.5	6.7	3.3			
29	81	1.3	-1.3	-0.2	13	2.7	-0.6	-2.6	308	5.2	4.1	-3.2	281	11.5	11.3	-2.1	262	19.9	19.7	2.6	256	20.1	19.5	4.9	276	14.3	14.2	-1.5			
30	126	1.4	-1.1	0.8	6	2.0	-0.2	-2.0	307	6.1	4.9	-3.7	277	11.9	11.8	-1.4	272	22.3	22.3	-0.6	257	20.1	19.6	4.4	269	15.4	15.4	0.4			
31	135	0.8	-0.6	0.6	339	1.9	0.7	-1.8	314	5.7	4.1	-4.0	279	11.8	11.7	-1.8	271	20.6	20.6	-0.2	256	22.2	21.6	5.2	270	16.8	16.8	0.0			

Daily Normals of Upper Air Winds (1971-2000)

398

VISAKHAPATANAM

FEBRUARY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	158	1.8	-0.7	1.7	325	2.1	1.2	-1.7	308	6.1	4.8	-3.7	274	12.1	12.1	-0.8	270	20.8	20.8	0.0	261	22.1	21.8	3.4	257	7.3	7.1	1.6			
2	180	1.0	0.0	1.0	6	1.8	-0.2	-1.8	306	5.2	4.2	-3.1	276	12.2	12.1	-1.3	275	20.4	20.3	-1.7	258	23.1	22.6	4.7	256	13.1	12.7	3.1			
3	141	0.6	-0.4	0.5	318	1.3	0.9	-1.0	307	5.8	4.6	-3.5	278	12.5	12.4	-1.8	266	21.9	21.9	1.4	253	21.6	20.7	6.2	264	12.7	12.6	1.3			
4	135	1.4	-1.0	1.0	300	2.4	2.1	-1.2	305	5.4	4.4	-3.1	280	13.3	13.1	-2.3	274	23.7	23.6	-1.8	247	23.9	22.0	9.3	270	13.7	13.7	0.1			
5	118	2.4	-2.1	1.1	332	1.7	0.8	-1.5	308	6.7	5.3	-4.1	272	14.4	14.4	-0.4	267	22.3	22.3	1.2	257	23.1	22.5	5.2	263	13.9	13.8	1.8			
6	153	1.8	-0.8	1.6	344	1.9	0.5	-1.8	315	6.1	4.3	-4.3	280	12.8	12.6	-2.3	265	22.7	22.6	2.0	257	22.8	22.2	5.2	267	13.9	13.9	0.8			
7	129	1.9	-1.5	1.2	318	1.5	1.0	-1.1	299	6.2	5.4	-3.0	289	11.9	11.2	-3.9	268	22.1	22.1	0.9	259	24.4	23.9	4.8	242	16.7	14.7	7.9			
8	197	1.7	0.5	1.6	322	1.8	1.1	-1.4	297	6.4	5.7	-2.9	286	13.2	12.7	-3.6	266	22.2	22.1	1.6	257	23.6	23.0	5.4	269	14.0	14.0	0.2			
9	207	2.8	1.3	2.5	311	2.1	1.6	-1.4	307	6.8	5.4	-4.1	279	12.7	12.6	-1.9	268	24.2	24.2	1.0	263	24.6	24.4	3.0	273	16.6	16.6	-0.9			
10	204	1.7	0.7	1.6	337	3.0	1.2	-2.8	316	6.6	4.6	-4.7	280	12.1	11.9	-2.0	265	23.3	23.2	1.9	263	22.1	21.9	2.8	295	10.8	9.8	-4.5			
11	198	2.0	0.6	1.9	342	1.9	0.6	-1.8	321	5.7	3.6	-4.4	286	11.8	11.4	-3.2	276	22.4	22.3	-2.5	260	23.0	22.7	3.9	236	6.9	5.7	3.8			
12	139	2.0	-1.3	1.5	331	2.1	1.0	-1.8	318	5.8	3.9	-4.3	283	11.4	11.1	-2.6	274	21.2	21.2	-1.4	258	24.1	23.6	5.0	258	8.8	8.6	1.9			
13	188	2.1	0.3	2.1	336	1.0	0.4	-0.9	313	5.2	3.8	-3.5	273	10.0	10.0	-0.5	272	20.8	20.8	-0.6	265	20.9	20.8	1.9	271	8.6	8.6	-0.2			
14	177	2.1	-0.1	2.1	319	0.9	0.6	-0.7	306	4.8	3.9	-2.8	266	11.4	11.4	0.7	269	20.9	20.9	0.4	256	23.4	22.7	5.8	260	8.2	8.1	1.4			
15	190	2.9	0.5	2.9	275	1.1	1.1	-0.1	307	4.8	3.8	-2.9	272	12.5	12.5	-0.5	264	21.7	21.6	2.3	259	24.0	23.6	4.5	271	16.9	16.9	-0.3			
16	182	2.6	0.1	2.6	302	1.5	1.3	-0.8	292	5.5	5.1	-2.1	274	12.4	12.4	-0.8	269	19.5	19.5	0.5	259	22.5	22.1	4.2	248	9.4	8.7	3.5			
17	210	3.9	2.0	3.4	287	1.7	1.6	-0.5	297	6.5	5.8	-2.9	270	14.6	14.6	0.0	270	20.1	20.1	0.1	251	22.0	20.9	7.0	273	11.0	11.0	-0.6			
18	214	4.5	2.5	3.7	321	1.4	0.9	-1.1	304	5.5	4.6	-3.1	274	14.0	14.0	-0.9	261	18.9	18.7	2.9	249	24.2	22.5	8.8	252	10.0	9.5	3.0			
19	219	2.8	1.8	2.2	315	2.0	1.4	-1.4	303	6.0	5.0	-3.3	272	13.2	13.2	-0.5	268	19.7	19.7	0.6	251	18.9	17.8	6.3	244	10.0	9.0	4.3			
20	216	5.4	3.2	4.4	317	2.2	1.5	-1.6	310	6.7	5.2	-4.3	279	12.2	12.0	-2.0	264	17.3	17.2	1.9	253	20.0	19.1	6.0	258	7.5	7.3	1.6			
21	206	4.6	2.0	4.1	328	1.9	1.0	-1.6	317	5.9	4.0	-4.3	277	11.5	11.4	-1.4	260	18.1	17.8	3.2	255	23.1	22.3	6.1	247	11.4	10.5	4.5			
22	218	5.6	3.4	4.4	315	1.6	1.1	-1.1	319	5.5	3.6	-4.2	274	12.1	12.1	-0.9	261	20.3	20.1	3.1	257	20.1	19.6	4.5	275	11.4	11.4	-0.9			
23	196	3.5	1.0	3.4	304	0.7	0.6	-0.4	312	5.1	3.8	-3.4	280	11.5	11.3	-2.0	272	18.1	18.1	-0.7	259	19.9	19.6	3.7	263	8.6	8.5	1.1			
24	186	1.8	0.2	1.8	303	1.7	1.4	-0.9	331	4.9	2.4	-4.3	273	10.3	10.3	-0.5	273	18.3	18.3	-1.1	251	18.4	17.4	6.1	258	12.8	12.5	2.7			
25	182	2.8	0.1	2.8	292	1.6	1.5	-0.6	327	5.9	3.2	-4.9	276	10.9	10.8	-1.1	274	17.8	17.8	-1.2	259	19.6	19.2	3.8	263	10.1	10.0	1.3			
26	210	3.2	1.6	2.8	292	1.1	1.0	-0.4	312	5.9	4.4	-3.9	274	13.1	13.1	-0.9	265	20.3	20.2	1.6	266	20.0	20.0	1.3	254	13.1	12.6	3.7			
27	192	4.2	0.9	4.1	291	0.9	0.8	-0.3	322	5.4	3.3	-4.3	280	9.5	9.4	-1.6	265	21.6	21.5	2.0	259	21.3	20.9	4.2	237	8.7	7.3	4.8			
28	218	3.7	2.3	2.9	315	1.0	0.7	-0.7	321	5.3	3.3	-4.1	286	11.1	10.7	-3.0	272	21.9	21.9	-0.8	267	19.8	19.8	1.1	263	4.1	4.1	0.5			
29	197	2.4	0.7	2.3	281	1.0	1.0	-0.2	351	6.4	1.0	-6.3	298	9.5	8.4	-4.4	266	20.6	20.6	1.3	259	15.5	15.2	3.0	44	3.0	-2.1	-2.2			

Daily Normals of Upper Air Winds (1971-2000)

VISAKHAPATANAM

MARCH

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	197	2.4	0.7	2.3	329	1.2	0.6	-1.0	331	5.5	2.7	-4.8	288	10.2	9.7	-3.1	267	18.2	18.2	0.8	260	20.1	19.8	3.5	260	6.3	6.2	1.1
2	193	2.7	0.6	2.6	300	1.6	1.4	-0.8	334	6.0	2.6	-5.4	287	10.7	10.2	-3.1	271	15.7	15.7	-0.2	251	17.0	16.1	5.4	223	6.9	4.7	5.1
3	195	3.1	0.8	3.0	354	0.9	0.1	-0.9	330	6.6	3.3	-5.7	282	9.9	9.7	-2.0	272	17.6	17.6	-0.7	250	19.4	18.3	6.5	254	8.7	8.4	2.4
4	198	3.9	1.2	3.7	352	1.4	0.2	-1.4	337	5.6	2.2	-5.1	282	8.5	8.3	-1.8	262	18.0	17.8	2.4	254	21.8	21.0	6.0	250	9.0	8.4	3.1
5	190	3.9	0.7	3.8	27	0.9	-0.4	-0.8	330	6.2	3.1	-5.4	285	9.0	8.7	-2.4	265	17.2	17.1	1.6	256	17.3	16.8	4.2	264	7.3	7.3	0.8
6	196	4.6	1.3	4.4	333	0.2	0.1	-0.2	332	5.5	2.6	-4.8	275	10.7	10.7	-1.0	267	18.8	18.8	1.1	257	19.5	19.0	4.4	280	8.6	8.5	-1.5
7	195	2.8	0.7	2.7	60	1.6	-1.4	-0.8	337	6.0	2.3	-5.5	274	10.2	10.2	-0.8	266	21.0	21.0	1.3	248	20.6	19.1	7.8	255	9.0	8.7	2.3
8	200	4.4	1.5	4.1	14	0.4	-0.1	-0.4	337	6.9	2.7	-6.4	291	10.1	9.4	-3.6	261	19.1	18.9	3.0	252	21.2	20.1	6.7	247	7.8	7.2	3.0
9	204	3.7	1.5	3.4	18	0.6	-0.2	-0.6	338	5.5	2.1	-5.1	281	9.7	9.5	-1.9	265	20.6	20.5	1.9	256	19.4	18.8	4.8	238	7.9	6.7	4.2
10	213	4.9	2.7	4.1	326	0.7	0.4	-0.6	323	5.9	3.5	-4.7	272	9.1	9.1	-0.3	265	18.5	18.4	1.5	258	22.8	22.3	4.7	267	6.7	6.7	0.3
11	230	5.9	4.5	3.8	253	1.4	1.3	0.4	326	6.0	3.4	-5.0	271	9.5	9.5	-0.1	263	19.3	19.2	2.3	254	20.9	20.1	5.8	228	5.9	4.4	3.9
12	231	7.0	5.5	4.4	255	1.1	1.1	0.3	325	5.7	3.3	-4.7	288	10.5	10.0	-3.3	264	19.6	19.5	2.1	260	22.9	22.6	3.9	262	19.6	19.4	2.6
13	232	6.8	5.3	4.2	255	1.1	1.1	0.3	328	6.2	3.3	-5.3	281	10.3	10.1	-2.0	270	18.8	18.8	-0.1	261	22.4	22.1	3.5	255	7.7	7.4	2.0
14	219	4.5	2.8	3.5	14	0.4	-0.1	-0.4	337	6.5	2.5	-6.0	291	9.3	8.7	-3.4	270	18.7	18.7	-0.1	265	19.4	19.3	1.6	262	12.2	12.1	1.8
15	225	4.2	3.0	3.0	262	1.4	1.4	0.2	335	6.5	2.8	-5.9	298	9.4	8.3	-4.4	271	15.4	15.4	-0.2	267	19.4	19.4	0.9	268	9.9	9.9	0.4
16	212	3.9	2.1	3.3	297	1.1	1.0	-0.5	342	7.1	2.2	-6.8	288	8.0	7.6	-2.4	264	15.7	15.6	1.7	261	18.4	18.2	3.0	251	8.3	7.8	2.7
17	221	6.1	4.0	4.6	276	1.8	1.8	-0.2	338	5.7	2.1	-5.3	285	8.5	8.2	-2.2	261	18.6	18.4	3.0	250	21.5	20.1	7.5	250	9.5	8.9	3.2
18	211	3.7	1.9	3.2	261	1.2	1.2	0.2	337	7.1	2.8	-6.5	286	8.5	8.2	-2.4	266	18.2	18.2	1.3	255	22.2	21.4	5.9	260	9.6	9.4	1.7
19	209	3.3	1.6	2.9	297	0.7	0.6	-0.3	340	5.8	2.0	-5.4	287	8.8	8.4	-2.6	268	17.3	17.3	0.6	259	18.1	17.8	3.5	255	11.3	10.9	2.9
20	199	4.6	1.5	4.4	215	1.6	0.9	1.3	334	6.2	2.7	-5.6	290	8.4	7.9	-2.9	267	18.2	18.2	0.8	256	21.8	21.2	5.1	271	14.9	14.9	-0.2
21	220	5.1	3.3	3.9	236	1.4	1.2	0.8	337	5.6	2.2	-5.2	286	7.6	7.3	-2.1	274	18.7	18.7	-1.3	263	20.2	20.1	2.3	269	9.4	9.4	0.1
22	224	4.6	3.2	3.3	249	1.9	1.8	0.7	341	6.2	2.0	-5.9	284	8.4	8.2	-2.0	265	18.5	18.4	1.7	257	22.5	21.9	5.2	275	6.1	6.1	-0.5
23	232	6.1	4.8	3.8	236	2.2	1.8	1.2	334	5.0	2.2	-4.5	288	7.8	7.4	-2.4	264	17.3	17.2	1.8	256	19.8	19.2	4.8	251	5.4	5.1	1.8
24	229	6.1	4.6	4.0	266	1.5	1.5	0.1	322	4.1	2.5	-3.2	275	8.7	8.7	-0.7	257	19.9	19.4	4.5	251	22.9	21.7	7.3	246	8.0	7.3	3.2
25	209	4.7	2.3	4.1	210	1.6	0.8	1.4	336	4.7	1.9	-4.3	271	8.1	8.1	-0.2	260	20.6	20.3	3.6	257	23.2	22.6	5.3	243	12.2	10.8	5.6
26	193	3.6	0.8	3.5	221	0.9	0.6	0.7	338	5.7	2.1	-5.3	279	8.4	8.3	-1.3	272	21.4	21.4	-0.9	268	21.9	21.9	0.6	257	12.6	12.3	2.9
27	214	2.7	1.5	2.2	333	0.4	0.2	-0.4	333	6.5	2.9	-5.8	296	7.6	6.8	-3.3	279	18.5	18.3	-2.8	271	23.7	23.7	-0.5	282	9.4	9.2	-2.0
28	182	3.8	0.1	3.8	256	0.4	0.4	0.1	340	5.9	2.0	-5.5	289	6.8	6.4	-2.2	271	16.9	16.9	-0.2	259	22.1	21.7	4.4	284	8.0	7.8	-1.9
29	219	4.8	3.0	3.7	253	1.7	1.6	0.5	342	6.0	1.9	-5.7	300	6.4	5.5	-3.2	275	17.4	17.3	-1.4	263	22.2	22.0	2.8	247	5.8	5.3	2.3
30	223	5.4	3.7	3.9	282	2.4	2.3	-0.5	337	5.8	2.3	-5.3	300	6.2	5.4	-3.1	266	16.2	16.2	1.0	260	20.6	20.3	3.7	253	9.5	9.1	2.8
31	105	1.6	-1.5	0.4	302	1.3	1.1	-0.7	350	5.0	0.9	-4.9	291	6.2	5.8	-2.2	264	16.4	16.3	1.8	252	21.2	20.2	6.4	264	9.5	9.4	1.0

Daily Normals of Upper Air Winds (1971-2000)

400

VISAKHAPATANAM

APRIL

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	196	4.1	1.1	3.9	261	1.2	1.2	0.2	353	4.3	0.5	-4.3	293	6.1	5.6	-2.4	267	17.2	17.2	1.0	258	20.3	19.8	4.3	273	8.7	8.7	-0.5			
2	205	5.3	2.2	4.8	264	1.8	1.8	0.2	350	4.5	0.8	-4.4	287	4.7	4.5	-1.4	259	16.2	15.9	3.1	255	18.4	17.7	4.9	279	5.6	5.5	-0.9			
3	220	4.5	2.9	3.5	259	1.6	1.6	0.3	352	4.8	0.7	-4.7	275	5.7	5.7	-0.5	276	18.0	17.9	-2.0	261	19.1	18.9	3.0	275	9.8	9.8	-0.9			
4	241	4.6	4.0	2.2	288	0.3	0.3	-0.1	356	4.0	0.3	-4.0	279	7.2	7.1	-1.1	270	16.8	16.8	0.0	258	20.3	19.9	4.2	252	5.6	5.3	1.7			
5	225	4.2	3.0	3.0	274	1.6	1.6	-0.1	4	2.7	-0.2	-2.7	268	7.5	7.5	0.3	269	18.1	18.1	0.4	264	22.9	22.8	2.2	266	7.3	7.3	0.5			
6	227	4.5	3.3	3.1	306	1.4	1.1	-0.8	342	4.0	1.2	-3.8	275	6.7	6.7	-0.6	273	18.5	18.5	-1.0	268	20.2	20.2	0.8	260	8.9	8.8	1.6			
7	233	4.9	3.9	2.9	289	1.8	1.7	-0.6	346	5.7	1.4	-5.5	301	6.2	5.3	-3.2	284	17.8	17.3	-4.3	268	18.6	18.6	0.7	272	6.1	6.1	-0.2			
8	244	6.0	5.4	2.6	238	1.5	1.3	0.8	348	4.9	1.0	-4.8	290	7.7	7.3	-2.6	281	16.1	15.8	-3.1	266	17.1	17.1	1.2	269	6.3	6.3	0.1			
9	235	6.3	5.2	3.6	245	1.7	1.5	0.7	345	4.3	1.1	-4.2	288	6.3	6.0	-2.0	261	17.2	17.0	2.6	256	20.0	19.4	5.0	285	8.2	7.9	-2.1			
10	218	4.2	2.6	3.3	236	1.4	1.2	0.8	344	4.0	1.1	-3.8	294	7.0	6.4	-2.8	271	15.7	15.7	-0.2	272	17.4	17.4	-0.6	281	6.0	5.9	-1.2			
11	232	4.9	3.9	3.0	287	2.4	2.3	-0.7	347	4.1	0.9	-4.0	309	5.8	4.5	-3.6	275	13.7	13.6	-1.2	270	18.3	18.3	0.1	279	7.0	6.9	-1.1			
12	242	5.5	4.8	2.6	270	1.6	1.6	0.0	344	4.3	1.2	-4.1	304	6.2	5.1	-3.5	282	13.8	13.5	-2.8	279	14.9	14.7	-2.3	280	5.0	4.9	-0.9			
13	223	6.5	4.4	4.8	261	1.2	1.2	0.2	352	4.1	0.6	-4.1	302	5.8	4.9	-3.1	281	13.4	13.2	-2.5	266	14.8	14.8	1.0	272	2.7	2.7	-0.1			
14	229	6.0	4.5	3.9	250	2.0	1.9	0.7	12	3.8	-0.8	-3.7	288	6.7	6.4	-2.1	266	13.9	13.9	1.0	255	16.9	16.3	4.4	220	3.3	2.1	2.5			
15	231	4.6	3.6	2.9	270	1.7	1.7	0.0	356	1.6	0.1	-1.6	286	6.8	6.5	-1.9	266	14.4	14.4	0.9	254	18.4	17.6	5.2	275	2.1	2.1	-0.2			
16	235	6.2	5.1	3.6	261	2.6	2.6	0.4	358	2.7	0.1	-2.7	275	6.2	6.2	-0.5	264	15.9	15.8	1.7	259	18.4	18.1	3.5	286	3.3	3.2	-0.9			
17	233	4.9	3.9	2.9	270	1.2	1.2	0.0	357	3.4	0.2	-3.4	284	6.3	6.1	-1.5	264	16.6	16.5	1.7	254	18.2	17.5	5.0	274	4.6	4.6	-0.3			
18	223	6.2	4.2	4.5	247	2.1	1.9	0.8	359	4.2	0.1	-4.2	303	5.6	4.7	-3.1	259	14.7	14.5	2.7	249	19.1	17.9	6.7	255	3.5	3.4	0.9			
19	230	4.7	3.6	3.0	292	2.2	2.0	-0.8	1	5.3	-0.1	-5.3	297	5.9	5.2	-2.7	259	16.0	15.7	3.1	248	19.8	18.4	7.4	146	1.4	-0.8	1.2			
20	230	4.8	3.7	3.1	307	2.0	1.6	-1.2	8	4.3	-0.6	-4.3	298	5.1	4.5	-2.4	258	16.1	15.7	3.4	250	22.3	20.9	7.7	284	4.2	4.1	-1.0			
21	236	5.9	4.9	3.3	270	1.9	1.9	0.0	14	4.1	-1.0	-4.0	292	5.3	4.9	-2.0	259	15.9	15.6	3.0	249	20.0	18.6	7.3	232	5.5	4.3	3.4			
22	235	6.0	4.9	3.4	298	1.9	1.7	-0.9	9	3.3	-0.5	-3.3	284	5.5	5.3	-1.3	258	16.2	15.8	3.5	262	17.1	16.9	2.4	266	3.2	3.2	0.2			
23	231	6.5	5.0	4.1	274	1.5	1.5	-0.1	11	4.6	-0.9	-4.5	287	5.7	5.4	-1.7	258	14.9	14.6	3.1	257	19.6	19.1	4.4	265	2.1	2.1	0.2			
24	233	6.6	5.3	4.0	294	2.0	1.8	-0.8	15	3.0	-0.8	-2.9	284	6.9	6.7	-1.7	261	15.0	14.8	2.3	253	15.0	14.4	4.3	269	5.8	5.8	0.1			
25	242	5.8	5.1	2.7	294	3.0	2.7	-1.2	25	3.5	-1.5	-3.2	281	5.3	5.2	-1.0	257	13.0	12.7	2.9	259	16.1	15.8	3.2	221	2.9	1.9	2.2			
26	236	7.0	5.8	3.9	299	2.3	2.0	-1.1	9	3.8	-0.6	-3.8	296	5.8	5.2	-2.5	271	14.2	14.2	-0.2	247	16.3	15.0	6.3	106	2.5	-2.4	0.7			
27	247	6.5	6.0	2.6	304	2.5	2.1	-1.4	9	4.0	-0.6	-4.0	298	5.5	4.9	-2.6	272	11.0	11.0	-0.4	257	15.5	15.1	3.4	54	1.7	-1.4	-1.0			
28	235	6.8	5.6	3.9	310	2.3	1.8	-1.5	11	4.7	-0.9	-4.6	318	5.7	3.8	-4.2	271	13.6	13.6	-0.3	262	15.8	15.7	2.1	18	1.6	-0.5	-1.5			
29	228	6.6	4.9	4.4	288	3.3	3.1	-1.0	7	4.7	-0.6	-4.7	310	6.0	4.6	-3.8	266	13.0	13.0	0.9	255	13.0	12.6	3.3	95	3.5	-3.5	0.3			
30	240	5.4	4.7	2.7	304	2.7	2.2	-1.5	16	4.7	-1.3	-4.5	320	6.4	4.1	-4.9	282	10.6	10.4	-2.2	263	12.0	11.9	1.4	103	1.3	-1.3	0.3			

Daily Normals of Upper Air Winds (1971-2000)

VISAKHAPATANAM

MAY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	232	5.8	4.6	3.6	291	2.2	2.1	-0.8	12	3.9	-0.8	-3.8	312	4.5	3.3	-3.0	275	10.9	10.9	-0.9	256	14.3	13.9	3.5	76	3.0	-2.9	-0.7
2	237	6.9	5.8	3.7	303	2.0	1.7	-1.1	13	4.1	-0.9	-4.0	308	5.0	3.9	-3.1	273	10.8	10.8	-0.6	264	11.8	11.7	1.3	129	4.0	-3.1	2.5
3	230	7.6	5.8	4.9	278	2.8	2.8	-0.4	360	4.4	0.0	-4.4	293	5.8	5.3	-2.3	278	8.9	8.8	-1.3	259	10.6	10.4	2.0	141	5.3	-3.3	4.1
4	224	6.0	4.2	4.3	278	3.0	3.0	-0.4	6	4.0	-0.4	-4.0	309	4.5	3.5	-2.8	273	10.0	10.0	-0.6	252	10.4	9.9	3.2	119	2.6	-2.3	1.3
5	230	7.1	5.4	4.6	296	2.5	2.3	-1.1	11	4.6	-0.9	-4.5	304	5.0	4.2	-2.8	263	10.7	10.6	1.3	248	10.9	10.1	4.0	69	4.9	-4.6	-1.8
6	234	6.0	4.9	3.5	280	2.3	2.3	-0.4	11	3.3	-0.6	-3.2	316	5.4	3.8	-3.9	271	10.9	10.9	-0.1	257	11.9	11.6	2.6	118	5.2	-4.6	2.4
7	236	5.2	4.3	2.9	314	3.0	2.2	-2.1	12	4.0	-0.8	-3.9	330	4.4	2.2	-3.8	270	8.2	8.2	0.0	249	9.6	8.9	3.5	95	4.7	-4.7	0.4
8	233	3.0	2.4	1.8	340	2.3	0.8	-2.2	14	4.9	-1.2	-4.8	342	4.2	1.3	-4.0	261	8.1	8.0	1.3	252	8.3	7.9	2.6	105	3.9	-3.8	1.0
9	230	4.0	3.1	2.6	290	2.0	1.9	-0.7	13	3.9	-0.9	-3.8	310	3.9	3.0	-2.5	254	8.0	7.7	2.2	250	8.0	7.5	2.8	97	5.2	-5.2	0.6
10	242	6.7	5.9	3.2	299	1.8	1.6	-0.9	6	3.7	-0.4	-3.7	314	4.2	3.0	-2.9	252	8.3	7.9	2.6	250	9.7	9.1	3.4	97	5.1	-5.1	0.6
11	228	4.6	3.4	3.1	306	1.4	1.1	-0.8	5	3.2	-0.3	-3.2	305	4.0	3.3	-2.3	267	8.4	8.4	0.4	243	9.5	8.5	4.3	135	4.4	-3.1	3.1
12	246	5.1	4.7	2.1	270	2.8	2.8	0.0	2	3.1	-0.1	-3.1	314	4.2	3.0	-2.9	263	6.6	6.6	0.8	244	7.1	6.4	3.1	105	6.1	-5.9	1.6
13	241	5.3	4.6	2.6	294	3.0	2.7	-1.2	2	4.7	-0.2	-4.7	328	4.6	2.4	-3.9	263	6.5	6.5	0.8	254	6.3	6.1	1.7	109	4.6	-4.4	1.5
14	237	5.7	4.8	3.1	280	2.9	2.9	-0.5	24	4.6	-1.9	-4.2	328	3.1	1.6	-2.6	252	3.5	3.3	1.1	235	5.0	4.1	2.9	92	5.7	-5.7	0.2
15	230	5.0	3.8	3.2	311	3.7	2.8	-2.4	30	3.6	-1.8	-3.1	320	3.3	2.1	-2.5	269	4.6	4.6	0.1	236	4.3	3.6	2.4	89	4.8	-4.8	-0.1
16	256	4.1	4.0	1.0	323	3.1	1.9	-2.5	15	4.9	-1.3	-4.7	328	4.5	2.4	-3.8	254	4.1	3.9	1.1	212	2.8	1.5	2.4	109	9.9	-9.4	3.2
17	235	6.3	5.2	3.6	307	3.1	2.5	-1.9	4	4.8	-0.3	-4.8	310	5.5	4.2	-3.5	289	6.0	5.7	-2.0	264	4.6	4.6	0.5	94	10.3	-10.3	0.7
18	262	4.5	4.5	0.6	322	4.6	2.8	-3.6	352	6.5	0.9	-6.4	324	5.8	3.4	-4.7	289	4.6	4.3	-1.5	213	3.7	2.0	3.1	109	7.5	-7.1	2.4
19	230	6.7	5.2	4.3	287	3.7	3.5	-1.1	356	5.9	0.4	-5.9	327	6.0	3.3	-5.0	257	5.3	5.2	1.2	209	4.6	2.2	4.0	90	10.9	-10.9	0.0
20	235	4.9	4.0	2.8	317	3.4	2.3	-2.5	2	4.8	-0.2	-4.8	316	4.0	2.8	-2.9	242	3.6	3.2	1.7	213	3.0	1.6	2.5	95	11.8	-11.8	1.0
21	248	4.8	4.4	1.8	303	3.1	2.6	-1.7	360	4.2	0.0	-4.2	325	4.5	2.6	-3.7	254	3.2	3.1	0.9	189	5.2	0.8	5.1	101	11.9	-11.7	2.3
22	243	5.7	5.1	2.6	276	3.1	3.1	-0.3	356	4.5	0.3	-4.5	332	5.0	2.3	-4.4	237	3.5	2.9	1.9	189	4.6	0.7	4.5	91	12.0	-12.0	0.3
23	239	5.6	4.8	2.9	297	3.3	2.9	-1.5	359	5.6	0.1	-5.6	324	5.4	3.2	-4.4	247	2.3	2.1	0.9	162	5.1	-1.6	4.8	98	11.8	-11.7	1.7
24	256	3.7	3.6	0.9	314	3.2	2.3	-2.2	7	5.1	-0.6	-5.1	336	4.3	1.7	-3.9	256	3.2	3.1	0.8	175	5.9	-0.5	5.9	94	9.1	-9.1	0.6
25	234	3.9	3.2	2.3	314	3.3	2.4	-2.3	9	4.4	-0.7	-4.3	338	3.5	1.3	-3.2	208	1.7	0.8	1.5	154	3.4	-1.5	3.1	100	12.2	-12.0	2.1
26	230	5.2	4.0	3.4	304	3.0	2.5	-1.7	7	4.2	-0.5	-4.2	334	3.7	1.6	-3.3	222	3.0	2.0	2.2	160	4.1	-1.4	3.9	96	9.8	-9.7	1.1
27	241	5.6	4.9	2.7	287	3.7	3.5	-1.1	354	4.1	0.4	-4.1	324	3.7	2.2	-3.0	233	0.5	0.4	0.3	145	3.3	-1.9	2.7	99	9.6	-9.5	1.5
28	254	6.1	5.9	1.7	301	3.9	3.3	-2.0	358	3.8	0.1	-3.8	328	2.6	1.4	-2.2	360	0.3	0.0	-0.3	129	3.3	-2.6	2.1	105	14.8	-14.3	3.7
29	243	6.3	5.6	2.8	316	3.3	2.3	-2.4	350	4.0	0.7	-3.9	333	3.6	1.6	-3.2	270	0.5	0.5	0.0	139	4.4	-2.9	3.3	102	13.2	-12.9	2.8
30	233	4.5	3.6	2.7	307	3.1	2.5	-1.9	18	2.5	-0.8	-2.4	326	4.1	2.3	-3.4	159	0.9	-0.3	0.8	145	4.9	-2.8	4.0	110	12.7	-12.0	4.3
31	235	5.2	4.3	3.0	301	2.6	2.2	-1.3	11	3.2	-0.6	-3.1	342	2.6	0.8	-2.5	106	0.7	-0.7	0.2	132	6.2	-4.6	4.2	100	14.6	-14.4	2.5

Daily Normals of Upper Air Winds (1971-2000)

VISAKHAPATANAM

JUNE

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	230	4.5	3.4	2.9	308	3.3	2.6	-2.0	4	4.0	-0.3	-4.0	339	3.9	1.4	-3.6	90	1.3	-1.3	0.0	110	5.9	-5.6	2.0	102	14.8	-14.5	3.2
2	244	4.6	4.1	2.0	324	3.6	2.1	-2.9	7	3.3	-0.4	-3.3	345	3.1	0.8	-3.0	93	1.8	-1.8	0.1	102	5.2	-5.1	1.1	93	15.5	-15.5	0.7
3	226	4.5	3.2	3.1	318	3.6	2.4	-2.7	354	4.0	0.4	-4.0	307	4.0	3.2	-2.4	105	3.1	-3.0	0.8	109	6.5	-6.2	2.1	93	17.2	-17.2	1.0
4	223	3.3	2.2	2.4	308	3.4	2.7	-2.1	346	3.3	0.8	-3.2	295	1.7	1.5	-0.7	92	2.4	-2.4	0.1	97	6.8	-6.8	0.8	94	18.4	-18.4	1.3
5	222	3.0	2.0	2.2	288	2.6	2.5	-0.8	322	2.4	1.5	-1.9	300	3.0	2.6	-1.5	86	2.6	-2.6	-0.2	105	9.0	-8.7	2.3	96	17.3	-17.2	1.7
6	227	4.8	3.5	3.3	284	3.8	3.7	-0.9	316	3.7	2.6	-2.7	297	3.8	3.4	-1.7	105	3.5	-3.4	0.9	104	9.2	-8.9	2.2	94	21.4	-21.3	1.5
7	239	5.5	4.7	2.8	277	4.1	4.1	-0.5	296	3.9	3.5	-1.7	290	2.9	2.7	-1.0	67	3.4	-3.1	-1.3	92	9.4	-9.4	0.4	83	18.8	-18.6	-2.4
8	239	4.4	3.8	2.3	275	4.3	4.3	-0.4	326	2.9	1.6	-2.4	319	2.8	1.8	-2.1	62	4.0	-3.5	-1.9	84	8.7	-8.7	-0.9	85	19.0	-18.9	-1.5
9	225	4.7	3.3	3.3	276	3.8	3.8	-0.4	311	3.5	2.6	-2.3	297	2.7	2.4	-1.2	70	5.8	-5.4	-2.0	89	9.7	-9.7	-0.1	90	18.6	-18.6	0.1
10	221	4.5	3.0	3.4	307	3.5	2.8	-2.1	337	3.3	1.3	-3.0	316	3.2	2.2	-2.3	90	4.6	-4.6	0.0	87	10.6	-10.6	-0.5	89	20.2	-20.2	-0.5
11	230	5.2	4.0	3.3	299	3.1	2.7	-1.5	343	3.9	1.1	-3.7	328	3.4	1.8	-2.9	67	4.0	-3.7	-1.6	87	10.5	-10.5	-0.6	85	20.9	-20.8	-2.0
12	243	3.5	3.1	1.6	294	3.9	3.6	-1.6	341	2.8	0.9	-2.6	333	1.8	0.8	-1.6	55	3.7	-3.0	-2.1	83	10.1	-10.0	-1.2	89	22.4	-22.4	-0.5
13	252	4.8	4.6	1.5	301	4.3	3.7	-2.2	345	3.9	1.0	-3.8	294	3.5	3.2	-1.4	70	5.9	-5.6	-2.0	91	12.1	-12.1	0.2	84	23.5	-23.4	-2.5
14	243	2.5	2.2	1.1	306	3.7	3.0	-2.2	313	3.3	2.4	-2.2	297	0.7	0.6	-0.3	84	4.1	-4.1	-0.4	73	11.4	-10.9	-3.4	93	19.6	-19.6	0.9
15	243	8.0	7.2	3.6	285	5.1	4.9	-1.3	305	4.7	3.9	-2.7	291	3.1	2.9	-1.1	64	5.2	-4.7	-2.3	74	13.4	-12.9	-3.7	82	25.5	-25.2	-3.6
16	252	6.8	6.5	2.1	294	4.4	4.0	-1.8	301	4.4	3.8	-2.3	301	2.7	2.3	-1.4	81	5.7	-5.6	-0.9	85	12.7	-12.7	-1.0	85	21.4	-21.3	-2.0
17	247	10.3	9.5	4.0	281	6.5	6.4	-1.2	289	5.8	5.5	-1.9	279	4.0	4.0	-0.6	82	5.0	-5.0	-0.7	76	13.2	-12.8	-3.2	88	23.0	-23.0	-1.0
18	249	9.8	9.2	3.5	283	7.7	7.5	-1.7	282	7.0	6.8	-1.5	276	5.4	5.4	-0.6	74	4.3	-4.1	-1.2	83	13.5	-13.4	-1.7	78	26.7	-26.1	-5.5
19	238	9.7	8.3	5.1	277	6.4	6.4	-0.8	279	7.1	7.0	-1.1	288	6.0	5.7	-1.9	80	6.0	-5.9	-1.0	84	14.3	-14.2	-1.4	84	24.0	-23.9	-2.6
20	256	7.1	6.9	1.7	290	5.4	5.1	-1.9	286	7.1	6.8	-2.0	287	4.7	4.5	-1.4	63	2.8	-2.5	-1.3	80	14.7	-14.5	-2.5	88	25.5	-25.5	-1.1
21	262	6.6	6.5	0.9	285	7.1	6.9	-1.8	287	6.7	6.4	-2.0	304	3.7	3.1	-2.1	79	7.6	-7.4	-1.5	88	16.1	-16.1	-0.7	84	30.6	-30.4	-3.3
22	265	6.3	6.3	0.5	287	6.4	6.1	-1.9	281	5.1	5.0	-1.0	277	2.3	2.3	-0.3	96	6.2	-6.2	0.7	88	17.1	-17.1	-0.7	86	28.0	-27.9	-2.0
23	254	7.0	6.7	1.9	276	7.8	7.8	-0.8	278	7.6	7.5	-1.1	282	5.3	5.2	-1.1	80	4.8	-4.7	-0.8	80	15.1	-14.9	-2.5	86	25.9	-25.9	-1.6
24	259	5.6	5.5	1.1	285	7.2	6.9	-1.9	292	7.7	7.1	-2.9	282	5.1	5.0	-1.1	78	4.7	-4.6	-1.0	79	14.0	-13.7	-2.7	90	28.7	-28.7	0.2
25	260	6.3	6.2	1.1	282	7.5	7.3	-1.5	288	7.5	7.1	-2.3	288	3.9	3.7	-1.2	89	6.9	-6.9	-0.1	84	15.9	-15.8	-1.6	79	27.8	-27.3	-5.2
26	252	6.6	6.3	2.0	281	7.6	7.5	-1.5	281	7.1	7.0	-1.4	277	3.3	3.3	-0.4	73	7.4	-7.1	-2.2	82	16.3	-16.1	-2.3	84	26.6	-26.5	-2.8
27	256	5.9	5.7	1.4	272	6.7	6.7	-0.2	279	7.6	7.5	-1.2	262	4.3	4.3	0.6	91	7.8	-7.8	0.2	83	17.4	-17.3	-2.2	82	27.9	-27.6	-4.0
28	239	6.3	5.4	3.3	278	7.5	7.4	-1.0	276	6.6	6.6	-0.7	272	3.5	3.5	-0.1	82	8.3	-8.2	-1.1	82	19.0	-18.8	-2.6	81	28.8	-28.5	-4.4
29	242	6.4	5.6	3.0	277	7.2	7.1	-0.9	280	6.0	5.9	-1.0	287	3.4	3.3	-1.0	92	8.3	-8.3	0.3	86	20.2	-20.1	-1.5	83	28.9	-28.7	-3.4
30	246	5.9	5.4	2.4	275	7.6	7.6	-0.7	270	5.4	5.4	0.0	293	2.5	2.3	-1.0	94	7.9	-7.9	0.5	88	18.9	-18.9	-0.7	85	29.5	-29.4	-2.5

Daily Normals of Upper Air Winds (1971-2000)

VISAKHAPATANAM

JULY

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	258	4.8	4.7	1.0	279	6.5	6.4	-1.0	280	6.2	6.1	-1.1	270	1.9	1.9	0.0	96	7.1	-7.1	0.7	85	17.9	-17.8	-1.6	89	31.7	-31.7	-0.5
2	254	5.9	5.7	1.6	278	6.8	6.7	-0.9	274	6.1	6.1	-0.4	272	3.4	3.4	-0.1	97	7.4	-7.3	0.9	88	16.3	-16.3	-0.5	87	28.7	-28.6	-1.7
3	249	10.8	10.1	3.9	273	5.9	5.9	-0.3	284	5.5	5.3	-1.3	285	2.8	2.7	-0.7	82	6.9	-6.8	-1.0	86	18.8	-18.8	-1.3	85	30.5	-30.4	-2.7
4	241	5.2	4.6	2.5	280	7.3	7.2	-1.3	277	6.4	6.3	-0.8	291	3.1	2.9	-1.1	83	7.8	-7.7	-0.9	82	19.1	-18.9	-2.5	84	31.0	-30.8	-3.5
5	252	3.9	3.7	1.2	282	6.0	5.9	-1.3	275	7.4	7.4	-0.7	270	2.9	2.9	0.0	75	9.1	-8.8	-2.3	84	19.8	-19.7	-2.2	86	31.9	-31.8	-2.2
6	261	4.5	4.4	0.7	280	6.6	6.5	-1.1	274	5.7	5.7	-0.4	293	3.6	3.3	-1.4	77	7.4	-7.2	-1.6	83	20.2	-20.0	-2.5	89	33.3	-33.3	-0.3
7	258	6.7	6.6	1.4	279	7.9	7.8	-1.3	270	6.5	6.5	0.0	290	2.3	2.2	-0.8	74	7.4	-7.1	-2.0	78	17.2	-16.8	-3.6	87	32.3	-32.2	-1.9
8	253	6.8	6.5	2.0	273	7.8	7.8	-0.4	272	7.2	7.2	-0.2	270	3.5	3.5	0.0	89	7.1	-7.1	-0.1	88	16.2	-16.2	-0.7	83	31.9	-31.6	-4.1
9	245	9.1	8.3	3.8	279	8.1	8.0	-1.3	279	7.3	7.2	-1.1	264	1.9	1.9	0.2	90	8.2	-8.2	0.0	87	20.6	-20.6	-1.1	84	35.0	-34.8	-3.8
10	258	8.7	8.5	1.8	286	7.6	7.3	-2.1	291	7.0	6.5	-2.5	320	2.3	1.5	-1.8	83	8.0	-7.9	-1.0	86	19.4	-19.4	-1.3	89	32.7	-32.7	-0.6
11	250	8.2	7.7	2.8	276	7.4	7.4	-0.8	278	7.6	7.5	-1.1	279	2.6	2.6	-0.4	91	8.1	-8.1	0.1	80	15.2	-15.0	-2.7	83	32.7	-32.5	-3.9
12	253	7.4	7.1	2.2	276	8.5	8.5	-0.9	276	8.3	8.3	-0.8	290	3.8	3.6	-1.3	82	8.3	-8.2	-1.1	80	18.1	-17.8	-3.1	80	31.5	-31.0	-5.5
13	248	8.4	7.8	3.2	261	8.2	8.1	1.3	270	8.9	8.9	0.0	270	3.3	3.3	0.0	88	6.6	-6.6	-0.2	84	18.3	-18.2	-1.9	83	30.0	-29.8	-3.7
14	249	7.3	6.8	2.6	276	7.7	7.7	-0.8	277	7.8	7.7	-0.9	265	2.4	2.4	0.2	83	10.2	-10.1	-1.2	83	19.1	-18.9	-2.4	83	27.3	-27.1	-3.2
15	255	8.9	8.6	2.3	287	6.4	6.1	-1.9	281	7.4	7.3	-1.4	277	2.3	2.3	-0.3	84	8.5	-8.5	-0.9	87	20.4	-20.4	-1.1	87	32.9	-32.9	-1.5
16	244	5.9	5.3	2.6	275	5.8	5.8	-0.5	280	6.6	6.5	-1.2	310	1.7	1.3	-1.1	88	7.5	-7.5	-0.2	79	18.4	-18.1	-3.4	81	32.0	-31.6	-4.9
17	265	6.3	6.3	0.6	283	6.9	6.7	-1.5	285	6.0	5.8	-1.5	342	1.9	0.6	-1.8	88	10.0	-10.0	-0.4	80	23.2	-22.8	-4.1	80	31.9	-31.5	-5.3
18	238	7.0	6.0	3.7	279	7.3	7.2	-1.2	277	7.9	7.8	-0.9	258	4.0	3.9	0.8	93	7.4	-7.4	0.4	80	20.0	-19.7	-3.3	82	31.5	-31.2	-4.4
19	246	7.7	7.1	3.1	282	7.5	7.3	-1.5	278	7.0	6.9	-1.0	286	2.6	2.5	-0.7	87	6.5	-6.5	-0.3	76	17.4	-16.9	-4.3	82	30.6	-30.3	-4.5
20	252	6.4	6.1	2.0	276	7.5	7.5	-0.8	274	7.9	7.9	-0.6	283	2.7	2.6	-0.6	75	7.3	-7.1	-1.9	80	17.6	-17.3	-3.0	84	31.7	-31.5	-3.3
21	248	8.7	8.0	3.3	273	6.6	6.6	-0.4	275	6.8	6.8	-0.6	257	1.7	1.7	0.4	90	7.9	-7.9	0.0	82	18.4	-18.2	-2.6	87	34.0	-34.0	-1.7
22	256	8.9	8.6	2.2	277	6.9	6.9	-0.8	280	6.9	6.8	-1.2	255	3.4	3.3	0.9	96	8.9	-8.9	0.9	80	22.2	-21.8	-4.0	81	32.3	-31.9	-4.8
23	254	6.9	6.6	1.9	281	5.9	5.8	-1.1	279	6.5	6.4	-1.0	255	3.0	2.9	0.8	96	9.1	-9.0	1.0	84	21.5	-21.4	-2.2	84	33.2	-33.0	-3.6
24	256	7.7	7.5	1.9	279	6.6	6.5	-1.0	268	7.3	7.3	0.3	262	2.2	2.2	0.3	87	9.3	-9.3	-0.5	82	20.4	-20.2	-2.7	83	30.1	-29.9	-3.5
25	260	8.3	8.2	1.5	273	7.5	7.5	-0.4	276	7.7	7.7	-0.8	273	3.5	3.5	-0.2	78	6.4	-6.3	-1.3	80	16.1	-15.9	-2.8	89	31.8	-31.8	-0.6
26	256	8.9	8.6	2.2	275	7.3	7.3	-0.7	279	7.7	7.6	-1.2	303	3.5	2.9	-1.9	73	6.4	-6.1	-1.9	80	19.4	-19.1	-3.4	83	31.1	-30.9	-3.6
27	259	7.0	6.9	1.3	282	7.7	7.5	-1.6	282	8.2	8.0	-1.7	298	2.6	2.3	-1.2	85	7.1	-7.1	-0.6	78	21.0	-20.6	-4.3	84	30.6	-30.4	-3.1
28	259	5.7	5.6	1.1	285	6.6	6.4	-1.7	285	7.0	6.8	-1.8	267	3.5	3.5	0.2	87	7.4	-7.4	-0.4	80	19.6	-19.3	-3.4	82	32.4	-32.1	-4.5
29	245	7.3	6.6	3.1	280	6.9	6.8	-1.2	284	6.4	6.2	-1.5	297	3.1	2.8	-1.4	80	8.2	-8.1	-1.5	85	17.4	-17.3	-1.5	83	30.5	-30.3	-3.7
30	260	7.9	7.8	1.4	286	6.6	6.4	-1.8	289	6.7	6.3	-2.2	319	2.0	1.3	-1.5	86	9.3	-9.3	-0.7	85	18.1	-18.0	-1.5	83	30.0	-29.8	-3.6
31	250	6.8	6.4	2.3	286	5.7	5.5	-1.6	287	5.8	5.5	-1.7	319	1.8	1.2	-1.4	88	8.3	-8.3	-0.3	81	20.0	-19.7	-3.2	80	32.0	-31.5	-5.6

Daily Normals of Upper Air Winds (1971-2000)

VISAKHAPATANAM

AUGUST

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	260	6.5	6.4	1.1	281	6.7	6.6	-1.3	281	6.8	6.7	-1.3	295	2.1	1.9	-0.9	78	7.5	-7.3	-1.6	81	18.8	-18.6	-2.9	80	33.7	-33.2	-5.6
2	256	6.7	6.5	1.6	283	7.1	6.9	-1.6	275	6.3	6.3	-0.5	258	3.3	3.2	0.7	88	8.4	-8.4	-0.3	83	18.9	-18.8	-2.2	78	33.5	-32.7	-7.1
3	255	7.4	7.2	1.9	275	8.0	8.0	-0.7	271	7.3	7.3	-0.1	276	3.8	3.8	-0.4	90	6.8	-6.8	0.0	78	17.0	-16.6	-3.6	82	27.0	-26.8	-3.6
4	261	6.3	6.2	1.0	280	6.7	6.6	-1.2	276	7.7	7.7	-0.8	269	4.6	4.6	0.1	95	7.8	-7.8	0.7	80	17.9	-17.6	-3.0	77	28.7	-27.9	-6.6
5	256	6.4	6.2	1.6	279	8.0	7.9	-1.2	270	7.9	7.9	0.0	292	3.1	2.9	-1.2	76	6.7	-6.5	-1.6	81	17.9	-17.7	-2.9	84	27.0	-26.8	-3.0
6	259	7.6	7.4	1.5	279	8.1	8.0	-1.2	276	7.9	7.9	-0.8	302	3.9	3.3	-2.1	72	6.3	-6.0	-2.0	74	15.5	-14.9	-4.2	86	29.8	-29.7	-2.2
7	259	7.5	7.4	1.4	282	8.2	8.0	-1.7	271	8.3	8.3	-0.2	299	4.5	3.9	-2.2	72	6.1	-5.8	-1.9	79	16.4	-16.1	-3.1	87	31.7	-31.6	-1.9
8	258	6.6	6.4	1.4	286	7.6	7.3	-2.1	281	7.6	7.4	-1.5	283	3.2	3.1	-0.7	91	5.9	-5.9	0.1	73	14.6	-14.0	-4.2	87	26.1	-26.1	-1.5
9	259	4.6	4.5	0.9	283	5.9	5.8	-1.3	275	5.7	5.7	-0.5	286	2.2	2.1	-0.6	92	9.0	-9.0	0.3	87	16.4	-16.4	-1.0	87	28.4	-28.4	-1.6
10	251	6.7	6.3	2.2	284	6.3	6.1	-1.5	269	6.1	6.1	0.1	304	1.8	1.5	-1.0	88	7.3	-7.3	-0.3	87	19.8	-19.8	-0.9	83	29.6	-29.4	-3.8
11	247	6.7	6.2	2.6	279	7.3	7.2	-1.1	278	5.6	5.5	-0.8	284	2.5	2.4	-0.6	79	7.0	-6.9	-1.3	82	19.7	-19.5	-2.6	85	31.9	-31.8	-2.9
12	249	6.7	6.3	2.4	291	7.6	7.1	-2.7	279	7.4	7.3	-1.2	303	3.1	2.6	-1.7	74	7.4	-7.1	-2.1	77	17.8	-17.3	-4.1	79	30.5	-29.9	-5.8
13	251	6.4	6.0	2.1	282	7.9	7.7	-1.7	283	7.3	7.1	-1.6	304	2.7	2.2	-1.5	87	7.1	-7.1	-0.4	81	17.9	-17.7	-2.8	90	29.9	-29.9	-0.2
14	260	6.0	5.9	1.0	286	7.1	6.8	-2.0	282	6.3	6.2	-1.3	320	2.3	1.5	-1.8	87	6.9	-6.9	-0.4	81	15.8	-15.6	-2.4	85	26.9	-26.8	-2.2
15	257	6.4	6.2	1.4	281	7.0	6.9	-1.4	277	6.3	6.2	-0.8	313	2.1	1.5	-1.4	91	7.8	-7.8	0.2	89	19.5	-19.5	-0.4	83	31.3	-31.1	-3.6
16	261	6.6	6.5	1.0	279	6.9	6.8	-1.1	278	6.8	6.7	-1.0	292	3.5	3.3	-1.3	93	7.8	-7.8	0.4	82	18.3	-18.1	-2.6	82	27.4	-27.1	-4.0
17	256	6.3	6.1	1.5	278	6.8	6.7	-1.0	283	7.7	7.5	-1.7	287	2.4	2.3	-0.7	79	7.3	-7.2	-1.4	87	16.7	-16.7	-1.0	85	28.2	-28.1	-2.6
18	257	6.7	6.5	1.5	282	6.9	6.8	-1.4	274	6.4	6.4	-0.5	262	3.7	3.7	0.5	88	6.3	-6.3	-0.2	82	16.5	-16.4	-2.2	86	29.9	-29.8	-2.3
19	249	7.9	7.4	2.8	274	5.6	5.6	-0.4	279	5.9	5.8	-0.9	279	1.2	1.2	-0.2	89	8.1	-8.1	-0.1	85	19.4	-19.3	-1.8	84	26.0	-25.8	-2.8
20	257	7.4	7.2	1.6	283	5.5	5.4	-1.2	285	4.6	4.4	-1.2	297	0.9	0.8	-0.4	88	9.6	-9.6	-0.4	85	18.8	-18.7	-1.6	81	27.5	-27.2	-4.3
21	245	5.3	4.8	2.2	282	5.6	5.5	-1.2	290	5.5	5.2	-1.9	335	1.4	0.6	-1.3	75	9.0	-8.7	-2.3	83	16.7	-16.6	-2.1	87	32.0	-31.9	-1.9
22	253	2.7	2.6	0.8	283	5.7	5.5	-1.3	266	4.8	4.8	0.3	225	1.8	1.3	1.3	91	9.0	-9.0	0.2	88	17.0	-17.0	-0.6	85	27.5	-27.4	-2.6
23	229	2.1	1.6	1.4	271	4.4	4.4	-0.1	265	5.4	5.4	0.5	239	2.1	1.8	1.1	97	8.6	-8.5	1.1	93	18.4	-18.4	1.0	88	29.8	-29.8	-1.3
24	245	4.1	3.7	1.7	281	4.2	4.1	-0.8	278	4.8	4.7	-0.7	284	2.1	2.0	-0.5	88	8.7	-8.7	-0.3	88	18.8	-18.8	-0.6	95	26.7	-26.6	2.5
25	244	3.2	2.9	1.4	288	4.5	4.3	-1.4	287	5.3	5.1	-1.6	355	2.3	0.2	-2.3	77	8.7	-8.5	-2.0	88	18.7	-18.7	-0.7	85	28.4	-28.3	-2.7
26	275	3.8	3.8	-0.3	280	5.7	5.6	-1.0	287	5.5	5.3	-1.6	324	2.7	1.6	-2.2	71	5.7	-5.4	-1.9	77	15.7	-15.3	-3.5	91	27.3	-27.3	0.3
27	255	4.3	4.2	1.1	283	6.3	6.1	-1.4	279	7.0	6.9	-1.1	261	4.0	4.0	0.6	81	6.6	-6.5	-1.0	75	13.0	-12.6	-3.3	88	28.4	-28.4	-0.9
28	246	5.6	5.1	2.3	278	7.4	7.3	-1.0	273	6.1	6.1	-0.3	298	3.0	2.6	-1.4	97	6.9	-6.9	0.8	87	17.2	-17.2	-1.0	84	25.0	-24.8	-2.8
29	252	6.1	5.8	1.9	282	6.0	5.9	-1.3	280	6.3	6.2	-1.1	326	1.1	0.6	-0.9	101	7.1	-7.0	1.4	90	15.7	-15.7	0.1	91	23.8	-23.8	0.6
30	250	7.4	7.0	2.5	276	7.0	7.0	-0.7	279	7.4	7.3	-1.1	287	2.1	2.0	-0.6	103	7.4	-7.2	1.7	90	15.4	-15.4	0.0	86	24.8	-24.7	-1.9
31	253	7.7	7.3	2.3	280	6.7	6.6	-1.2	281	6.2	6.1	-1.2	300	2.4	2.1	-1.2	93	8.6	-8.6	0.4	88	17.8	-17.8	-0.5	84	27.3	-27.1	-2.9

Daily Normals of Upper Air Winds (1971-2000)

VISAKHAPATANAM

SEPTEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	244	7.0	6.3	3.1	274	6.0	6.0	-0.4	283	4.8	4.7	-1.1	319	2.1	1.4	-1.6	89	6.3	-6.3	-0.1	82	14.8	-14.6	-2.1	85	25.5	-25.4	-2.1
2	243	6.9	6.2	3.1	272	6.9	6.9	-0.2	273	5.8	5.8	-0.3	283	1.3	1.3	-0.3	87	7.9	-7.9	-0.4	88	15.9	-15.9	-0.6	90	25.6	-25.6	0.0
3	247	5.2	4.8	2.0	277	6.4	6.3	-0.8	280	5.9	5.8	-1.0	281	2.5	2.5	-0.5	81	7.0	-6.9	-1.1	81	17.8	-17.6	-2.8	89	23.9	-23.9	-0.4
4	264	6.3	6.3	0.7	280	7.7	7.6	-1.3	282	8.2	8.0	-1.7	255	2.4	2.3	0.6	91	7.3	-7.3	0.1	88	16.5	-16.5	-0.5	78	21.9	-21.4	-4.6
5	241	5.2	4.6	2.5	276	6.3	6.3	-0.7	284	6.6	6.4	-1.6	267	1.9	1.9	0.1	89	6.4	-6.4	-0.1	86	15.2	-15.2	-1.1	90	23.4	-23.4	0.0
6	253	5.1	4.9	1.5	291	5.5	5.1	-2.0	288	6.5	6.2	-2.0	300	2.4	2.1	-1.2	92	6.9	-6.9	0.2	84	16.9	-16.8	-1.7	84	27.0	-26.9	-2.7
7	250	4.7	4.4	1.6	288	4.5	4.3	-1.4	281	5.2	5.1	-1.0	289	2.1	2.0	-0.7	83	5.7	-5.7	-0.7	83	13.8	-13.7	-1.7	89	26.7	-26.7	-0.5
8	250	6.3	5.9	2.2	291	4.8	4.5	-1.7	298	4.4	3.9	-2.1	335	1.4	0.6	-1.3	88	5.4	-5.4	-0.2	90	14.3	-14.3	0.0	86	23.7	-23.7	-1.5
9	243	3.9	3.5	1.8	307	3.8	3.0	-2.3	317	3.8	2.6	-2.8	20	1.5	-0.5	-1.4	78	7.1	-6.9	-1.5	87	13.9	-13.9	-0.7	84	22.7	-22.6	-2.5
10	241	3.8	3.3	1.8	278	2.7	2.7	-0.4	291	3.9	3.6	-1.4	198	0.6	0.2	0.6	101	5.8	-5.7	1.1	88	14.3	-14.3	-0.5	94	22.9	-22.9	1.5
11	240	4.8	4.1	2.4	256	3.7	3.6	0.9	264	3.8	3.8	0.4	270	0.4	0.4	0.0	89	7.3	-7.3	-0.1	87	15.9	-15.9	-0.8	88	19.4	-19.4	-0.8
12	247	5.0	4.6	2.0	273	3.6	3.6	-0.2	277	3.3	3.3	-0.4	225	1.4	1.0	1.0	93	6.6	-6.6	0.4	82	13.7	-13.6	-1.9	80	23.2	-22.8	-4.2
13	244	5.1	4.6	2.2	279	3.3	3.3	-0.5	284	3.4	3.3	-0.8	225	0.4	0.3	0.3	95	6.2	-6.2	0.5	88	12.5	-12.5	-0.4	93	23.0	-23.0	1.3
14	248	5.7	5.3	2.1	292	2.7	2.5	-1.0	317	2.5	1.7	-1.8	72	0.3	-0.3	-0.1	93	7.3	-7.3	0.4	88	14.6	-14.6	-0.6	87	18.7	-18.7	-0.9
15	232	4.4	3.5	2.7	305	2.1	1.7	-1.2	326	2.7	1.5	-2.2	360	0.2	0.0	-0.2	95	7.5	-7.5	0.6	95	13.8	-13.7	1.3	91	18.6	-18.6	0.3
16	247	4.0	3.7	1.6	313	2.1	1.5	-1.4	339	1.9	0.7	-1.8	95	1.2	-1.2	0.1	87	6.8	-6.8	-0.4	91	11.8	-11.8	0.2	97	19.3	-19.2	2.2
17	248	3.8	3.5	1.4	315	1.4	1.0	-1.0	310	1.6	1.2	-1.0	149	0.6	-0.3	0.5	87	6.0	-6.0	-0.3	89	13.3	-13.3	-0.2	81	19.9	-19.6	-3.2
18	256	4.0	3.9	1.0	324	1.9	1.1	-1.5	323	2.0	1.2	-1.6	73	1.7	-1.6	-0.5	93	7.4	-7.4	0.4	93	11.0	-11.0	0.6	88	22.0	-22.0	-0.6
19	234	1.9	1.5	1.1	16	1.9	-0.5	-1.8	353	2.3	0.3	-2.3	111	1.7	-1.6	0.6	83	4.2	-4.2	-0.5	104	10.6	-10.3	2.5	84	18.2	-18.1	-1.9
20	11	0.5	-0.1	-0.5	3	2.1	-0.1	-2.1	15	2.0	-0.5	-1.9	92	2.5	-2.5	0.1	90	5.2	-5.2	0.0	107	11.1	-10.6	3.3	93	16.0	-16.0	0.8
21	186	1.0	0.1	1.0	21	1.9	-0.7	-1.8	18	0.6	-0.2	-0.6	101	2.6	-2.6	0.5	101	6.7	-6.6	1.3	93	10.7	-10.7	0.6	86	18.3	-18.3	-1.3
22	174	0.9	-0.1	0.9	337	0.8	0.3	-0.7	18	0.6	-0.2	-0.6	101	1.6	-1.6	0.3	87	5.6	-5.6	-0.3	91	8.3	-8.3	0.2	88	17.2	-17.2	-0.7
23	194	3.4	0.8	3.3	360	0.2	0.0	-0.2	53	0.5	-0.4	-0.3	108	2.2	-2.1	0.7	98	5.2	-5.2	0.7	95	9.4	-9.4	0.8	92	17.7	-17.7	0.7
24	208	1.7	0.8	1.5	144	0.9	-0.5	0.7	115	1.4	-1.3	0.6	149	2.9	-1.5	2.5	88	6.4	-6.4	-0.2	87	12.3	-12.3	-0.7	87	16.9	-16.9	-0.9
25	265	2.3	2.3	0.2	5	1.2	-0.1	-1.2	27	0.9	-0.4	-0.8	77	0.9	-0.9	-0.2	98	4.9	-4.9	0.7	86	10.4	-10.4	-0.7	88	18.5	-18.5	-0.5
26	234	1.7	1.4	1.0	34	1.1	-0.6	-0.9	347	1.3	0.3	-1.3	135	0.1	-0.1	0.1	108	4.4	-4.2	1.4	103	10.0	-9.7	2.3	89	16.8	-16.8	-0.3
27	149	1.2	-0.6	1.0	13	0.9	-0.2	-0.9	3	2.0	-0.1	-2.0	120	1.4	-1.2	0.7	103	5.3	-5.2	1.2	101	8.3	-8.1	1.6	85	17.0	-16.9	-1.4
28	95	2.3	-2.3	0.2	28	1.9	-0.9	-1.7	30	2.4	-1.2	-2.1	108	2.0	-1.9	0.6	75	5.1	-4.9	-1.3	87	8.3	-8.3	-0.5	91	18.7	-18.7	0.2
29	112	1.6	-1.5	0.6	36	1.7	-1.0	-1.4	51	1.4	-1.1	-0.9	107	1.7	-1.6	0.5	91	3.9	-3.9	0.1	104	8.6	-8.3	2.1	84	12.5	-12.4	-1.4
30	135	2.0	-1.4	1.4	47	2.6	-1.9	-1.8	35	2.1	-1.2	-1.7	72	2.0	-1.9	-0.6	96	2.8	-2.8	0.3	114	6.7	-6.1	2.7	104	14.9	-14.5	3.5

Daily Normals of Upper Air Winds (1971-2000)

VISAKHAPATANAM

OCTOBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	128	1.8	-1.4	1.1	67	1.3	-1.2	-0.5	72	1.6	-1.5	-0.5	103	1.7	-1.7	0.4	104	3.7	-3.6	0.9	107	6.4	-6.1	1.9	101	14.6	-14.3	2.8
2	112	1.6	-1.5	0.6	24	2.0	-0.8	-1.8	50	1.6	-1.2	-1.0	58	1.9	-1.6	-1.0	123	4.5	-3.8	2.5	117	7.4	-6.6	3.3	93	12.6	-12.6	0.7
3	139	2.0	-1.3	1.5	48	2.7	-2.0	-1.8	45	0.7	-0.5	-0.5	137	2.1	-1.4	1.5	112	4.5	-4.2	1.7	102	4.8	-4.7	1.0	95	13.3	-13.2	1.2
4	126	2.4	-1.9	1.4	81	1.9	-1.9	-0.3	84	1.0	-1.0	-0.1	163	1.0	-0.3	1.0	134	3.7	-2.7	2.6	108	8.9	-8.4	2.8	89	13.7	-13.7	-0.2
5	80	3.9	-3.8	-0.7	65	1.4	-1.3	-0.6	76	0.8	-0.8	-0.2	137	1.9	-1.3	1.4	126	4.1	-3.3	2.4	123	6.7	-5.6	3.6	86	14.5	-14.5	-0.9
6	58	3.9	-3.3	-2.1	51	1.9	-1.5	-1.2	96	1.0	-1.0	0.1	130	2.3	-1.8	1.5	123	3.0	-2.5	1.6	131	4.6	-3.5	3.0	87	10.5	-10.5	-0.6
7	92	3.0	-3.0	0.1	50	1.7	-1.3	-1.1	60	1.4	-1.2	-0.7	160	1.2	-0.4	1.1	129	3.6	-2.8	2.3	126	5.7	-4.6	3.3	99	8.5	-8.4	1.4
8	84	3.6	-3.6	-0.4	45	2.5	-1.8	-1.8	29	1.3	-0.6	-1.1	193	2.6	0.6	2.5	141	2.6	-1.6	2.0	121	5.8	-5.0	3.0	101	9.7	-9.5	1.9
9	110	3.0	-2.8	1.0	47	2.2	-1.6	-1.5	23	0.8	-0.3	-0.7	218	1.8	1.1	1.4	126	3.9	-3.2	2.3	112	5.9	-5.5	2.2	97	10.8	-10.7	1.3
10	115	1.9	-1.7	0.8	36	3.2	-1.9	-2.6	45	2.1	-1.5	-1.5	77	2.3	-2.2	-0.5	120	3.2	-2.8	1.6	114	4.8	-4.4	2.0	108	10.2	-9.7	3.2
11	101	2.0	-2.0	0.4	41	2.3	-1.5	-1.7	11	1.5	-0.3	-1.5	111	1.7	-1.6	0.6	129	2.1	-1.6	1.3	117	5.5	-4.9	2.5	100	6.6	-6.5	1.1
12	114	2.2	-2.0	0.9	38	3.6	-2.2	-2.8	25	3.1	-1.3	-2.8	108	2.0	-1.9	0.6	110	2.0	-1.9	0.7	126	5.2	-4.2	3.1	94	10.7	-10.7	0.7
13	63	3.1	-2.8	-1.4	32	4.6	-2.4	-3.9	27	4.0	-1.8	-3.6	72	1.6	-1.5	-0.5	150	1.6	-0.8	1.4	150	5.4	-2.7	4.7	113	8.2	-7.6	3.2
14	62	5.4	-4.8	-2.5	42	5.9	-4.0	-4.4	38	3.9	-2.4	-3.1	83	0.8	-0.8	-0.1	171	1.2	-0.2	1.2	155	6.3	-2.7	5.7	103	11.7	-11.4	2.7
15	51	5.3	-4.1	-3.3	43	5.4	-3.7	-4.0	53	3.1	-2.5	-1.9	47	2.2	-1.6	-1.5	157	2.5	-1.0	2.3	163	5.5	-1.6	5.3	109	9.7	-9.2	3.2
16	69	4.3	-4.0	-1.5	56	4.6	-3.8	-2.6	67	3.4	-3.1	-1.3	98	1.4	-1.4	0.2	180	2.5	0.0	2.5	129	6.4	-5.0	4.0	105	10.2	-9.9	2.6
17	40	4.3	-2.8	-3.3	47	4.7	-3.4	-3.2	55	3.3	-2.7	-1.9	180	1.0	0.0	1.0	180	1.1	0.0	1.1	164	4.0	-1.1	3.8	110	9.5	-8.9	3.3
18	58	3.4	-2.9	-1.8	62	3.2	-2.8	-1.5	36	1.7	-1.0	-1.4	215	1.2	0.7	1.0	198	2.2	0.7	2.1	172	4.3	-0.6	4.3	121	7.4	-6.4	3.8
19	58	1.9	-1.6	-1.0	38	2.4	-1.5	-1.9	45	0.7	-0.5	-0.5	203	1.3	0.5	1.2	175	1.1	-0.1	1.1	147	3.1	-1.7	2.6	114	9.1	-8.3	3.7
20	82	2.1	-2.1	-0.3	28	3.0	-1.4	-2.6	61	1.0	-0.9	-0.5	207	1.1	0.5	1.0	212	2.2	1.2	1.9	184	3.2	0.2	3.2	114	7.7	-7.1	3.1
21	82	2.2	-2.2	-0.3	41	3.3	-2.2	-2.5	10	1.1	-0.2	-1.1	212	0.9	0.5	0.8	233	2.0	1.6	1.2	216	3.4	2.0	2.8	113	6.1	-5.6	2.4
22	71	1.8	-1.7	-0.6	40	2.6	-1.7	-2.0	47	1.6	-1.2	-1.1	245	1.7	1.5	0.7	245	3.1	2.8	1.3	206	4.3	1.9	3.9	128	6.1	-4.8	3.8
23	48	4.2	-3.1	-2.8	44	4.2	-2.9	-3.0	41	1.1	-0.7	-0.8	266	1.6	1.6	0.1	270	2.9	2.9	0.0	210	3.6	1.8	3.1	150	4.6	-2.3	4.0
24	61	6.3	-5.5	-3.1	45	4.2	-3.0	-3.0	45	2.3	-1.6	-1.6	333	0.4	0.2	-0.4	270	2.2	2.2	0.0	204	3.7	1.5	3.4	129	4.5	-3.5	2.8
25	60	5.6	-4.9	-2.8	45	4.7	-3.3	-3.3	26	2.8	-1.2	-2.5	225	0.3	0.2	0.2	246	3.7	3.4	1.5	222	5.4	3.6	4.0	113	4.3	-4.0	1.7
26	52	6.5	-5.1	-4.0	46	5.5	-4.0	-3.8	34	2.3	-1.3	-1.9	277	0.8	0.8	-0.1	268	5.1	5.1	0.2	234	7.4	6.0	4.4	172	0.7	-0.1	0.7
27	44	5.5	-3.8	-4.0	47	4.8	-3.5	-3.3	28	3.0	-1.4	-2.6	90	0.1	-0.1	0.0	232	4.6	3.6	2.8	218	6.6	4.0	5.2	91	4.6	-4.6	0.1
28	71	4.6	-4.3	-1.5	53	4.8	-3.8	-2.9	28	2.7	-1.3	-2.4	242	1.9	1.7	0.9	240	2.0	1.7	1.0	205	5.0	2.1	4.5	105	6.3	-6.1	1.6
29	59	5.2	-4.5	-2.7	38	5.4	-3.3	-4.3	27	2.5	-1.1	-2.2	252	0.3	0.3	0.1	222	5.7	3.8	4.2	220	8.3	5.3	6.4	160	4.1	-1.4	3.9
30	51	5.0	-3.9	-3.2	48	6.2	-4.6	-4.1	43	2.2	-1.5	-1.6	297	0.2	0.2	-0.1	239	4.1	3.5	2.1	230	7.8	6.0	5.0	156	5.2	-2.1	4.8
31	60	5.0	-4.3	-2.5	55	6.3	-5.2	-3.6	72	2.5	-2.4	-0.8	139	0.9	-0.6	0.7	266	3.2	3.2	0.2	211	7.8	4.0	6.7	134	3.7	-2.7	2.6

Daily Normals of Upper Air Winds (1971-2000)

VISAKHAPATANAM

NOVEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa			
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N
1	60	5.1	-4.4	-2.5	51	5.4	-4.2	-3.4	84	2.0	-2.0	-0.2	127	0.5	-0.4	0.3	276	3.8	3.8	-0.4	217	5.5	3.3	4.4	83	2.3	-2.3	-0.3
2	62	7.9	-7.0	-3.7	59	4.9	-4.2	-2.5	60	0.8	-0.7	-0.4	257	0.9	0.9	0.2	242	7.3	6.5	3.4	222	9.4	6.2	7.0	233	1.5	1.2	0.9
3	55	6.7	-5.5	-3.9	58	4.9	-4.1	-2.6	67	1.5	-1.4	-0.6	360	1.9	0.0	-1.9	262	8.2	8.1	1.2	231	9.3	7.2	5.9	143	7.4	-4.4	5.9
4	57	6.9	-5.8	-3.7	46	5.2	-3.7	-3.6	28	1.9	-0.9	-1.7	337	1.3	0.5	-1.2	259	6.4	6.3	1.2	225	8.5	6.0	6.0	152	5.3	-2.5	4.7
5	51	7.8	-6.1	-4.9	42	5.9	-4.0	-4.4	29	2.3	-1.1	-2.0	329	2.7	1.4	-2.3	250	5.8	5.4	2.0	230	10.4	7.9	6.7	139	1.8	-1.2	1.4
6	57	6.9	-5.8	-3.8	48	5.8	-4.3	-3.9	48	2.5	-1.9	-1.7	20	1.5	-0.5	-1.4	255	5.8	5.6	1.5	235	9.6	7.9	5.5	308	2.8	2.2	-1.7
7	60	6.7	-5.8	-3.4	40	5.4	-3.5	-4.1	36	2.9	-1.7	-2.3	342	1.3	0.4	-1.2	270	5.7	5.7	0.0	235	6.7	5.5	3.8	133	1.8	-1.3	1.2
8	52	6.0	-4.7	-3.7	37	5.1	-3.1	-4.1	21	2.5	-0.9	-2.3	318	1.3	0.9	-1.0	271	5.1	5.1	-0.1	232	8.0	6.3	5.0	45	0.4	-0.3	-0.3
9	55	4.2	-3.4	-2.4	28	4.4	-2.1	-3.9	21	2.6	-0.9	-2.4	300	2.8	2.4	-1.4	259	7.1	7.0	1.3	227	6.7	4.9	4.5	18	0.9	-0.3	-0.9
10	61	4.1	-3.6	-2.0	40	4.8	-3.1	-3.7	16	1.9	-0.5	-1.8	297	2.7	2.4	-1.2	267	6.5	6.5	0.3	236	8.9	7.4	5.0	197	5.8	1.7	5.5
11	60	5.0	-4.3	-2.5	42	4.8	-3.2	-3.6	358	2.7	0.1	-2.7	302	2.5	2.1	-1.3	250	7.2	6.7	2.5	230	10.1	7.7	6.5	204	3.7	1.5	3.4
12	65	5.7	-5.2	-2.4	49	5.7	-4.3	-3.7	20	2.0	-0.7	-1.9	297	0.9	0.8	-0.4	257	8.3	8.1	1.8	230	10.6	8.1	6.8	220	3.0	1.9	2.3
13	54	5.4	-4.4	-3.2	43	5.6	-3.8	-4.1	42	2.5	-1.7	-1.9	297	1.6	1.4	-0.7	260	6.1	6.0	1.1	237	9.0	7.5	4.9	98	1.4	-1.4	0.2
14	52	8.0	-6.3	-5.0	36	5.9	-3.5	-4.8	49	2.8	-2.1	-1.8	29	1.0	-0.5	-0.9	263	5.2	5.2	0.6	217	8.8	5.3	7.0	165	3.8	-1.0	3.7
15	82	6.8	-6.7	-0.9	39	5.0	-3.2	-3.9	43	2.3	-1.6	-1.7	283	1.3	1.3	-0.3	245	7.0	6.3	3.0	233	11.1	8.8	6.7	249	3.1	2.9	1.1
16	62	5.0	-4.4	-2.3	37	4.5	-2.7	-3.6	60	1.6	-1.4	-0.8	270	2.1	2.1	0.0	244	6.4	5.8	2.8	218	11.0	6.7	8.7	228	3.6	2.7	2.4
17	62	5.5	-4.8	-2.6	28	4.7	-2.2	-4.1	18	1.9	-0.6	-1.8	277	1.7	1.7	-0.2	248	8.4	7.8	3.1	212	12.5	6.6	10.6	243	1.8	1.6	0.8
18	62	4.7	-4.1	-2.2	42	4.7	-3.1	-3.5	13	1.8	-0.4	-1.8	299	1.8	1.6	-0.9	251	9.4	8.9	3.1	232	12.2	9.6	7.5	218	5.8	3.6	4.6
19	59	5.6	-4.8	-2.9	29	4.7	-2.3	-4.1	16	1.8	-0.5	-1.7	293	3.6	3.3	-1.4	252	10.8	10.2	3.4	222	13.5	9.0	10.1	211	3.9	2.0	3.3
20	55	5.7	-4.7	-3.3	32	4.1	-2.2	-3.5	344	1.5	0.4	-1.4	285	3.8	3.7	-1.0	252	11.3	10.7	3.5	232	14.1	11.1	8.7	228	2.5	1.9	1.7
21	50	6.7	-5.2	-4.3	36	4.2	-2.5	-3.4	30	1.4	-0.7	-1.2	240	1.4	1.2	0.7	239	11.4	9.8	5.9	222	13.2	8.8	9.8	190	3.9	0.7	3.8
22	59	5.5	-4.7	-2.8	33	4.4	-2.4	-3.7	41	2.0	-1.3	-1.5	242	3.2	2.8	1.5	243	12.0	10.7	5.5	220	15.0	9.7	11.5	234	4.6	3.7	2.7
23	60	5.9	-5.1	-2.9	31	4.8	-2.5	-4.1	11	1.0	-0.2	-1.0	256	2.5	2.4	0.6	242	10.6	9.4	5.0	229	16.2	12.2	10.6	225	6.6	4.7	4.7
24	52	4.3	-3.4	-2.7	26	5.2	-2.3	-4.7	24	2.0	-0.8	-1.8	301	2.7	2.3	-1.4	255	10.0	9.7	2.6	231	13.8	10.7	8.7	217	3.6	2.2	2.9
25	55	4.7	-3.9	-2.7	37	5.3	-3.2	-4.2	32	1.3	-0.7	-1.1	303	4.0	3.4	-2.2	260	10.4	10.2	1.8	237	16.5	13.8	9.1	250	9.2	8.6	3.2
26	52	5.1	-4.0	-3.1	23	3.8	-1.5	-3.5	355	1.1	0.1	-1.1	307	4.4	3.5	-2.6	263	11.3	11.2	1.4	236	14.3	11.8	8.1	252	9.0	8.6	2.8
27	48	4.6	-3.4	-3.1	28	4.0	-1.9	-3.5	25	1.4	-0.6	-1.3	321	2.8	1.8	-2.2	258	10.1	9.9	2.1	237	12.8	10.7	7.0	252	3.9	3.7	1.2
28	52	4.9	-3.9	-3.0	23	4.4	-1.7	-4.1	356	2.6	0.2	-2.6	290	4.9	4.6	-1.7	265	9.5	9.5	0.9	236	17.2	14.3	9.5	257	5.9	5.8	1.3
29	51	5.1	-4.0	-3.2	19	4.3	-1.4	-4.1	339	2.5	0.9	-2.3	293	5.6	5.1	-2.2	257	10.6	10.3	2.3	226	16.3	11.8	11.2	234	4.8	3.9	2.8
30	49	4.6	-3.5	-3.0	26	3.7	-1.6	-3.3	3	1.9	-0.1	-1.9	300	5.4	4.7	-2.7	273	13.1	13.1	-0.6	242	16.0	14.1	7.5	252	7.8	7.4	2.4

Daily Normals of Upper Air Winds (1971-2000)

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VISAKHAPATANAM

DECEMBER

1730 IST

Date	925 hPa				850 hPa				700 hPa				500 hPa				300 hPa				200 hPa				100 hPa						
	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E	N	DIR	Vo	E
1	44	4.2	-2.9	-3.0	28	4.4	-2.1	-3.9	4	1.3	-0.1	-1.3	310	5.5	4.2	-3.5	268	11.6	11.6	0.4	247	15.5	14.3	6.1	260	7.8	7.7	1.4			
2	49	5.2	-3.9	-3.4	20	4.1	-1.4	-3.9	328	1.5	0.8	-1.3	291	5.0	4.7	-1.8	255	11.6	11.2	3.1	232	16.3	12.9	10.0	255	7.0	6.8	1.8			
3	54	7.1	-5.7	-4.2	36	3.9	-2.3	-3.2	360	1.1	0.0	-1.1	285	3.0	2.9	-0.8	266	9.4	9.4	0.7	229	16.9	12.8	11.0	218	4.9	3.0	3.9			
4	56	7.0	-5.8	-3.9	18	4.4	-1.4	-4.2	11	1.6	-0.3	-1.6	290	2.3	2.2	-0.8	254	11.4	10.9	3.2	236	16.2	13.5	9.0	272	5.3	5.3	-0.2			
5	52	5.3	-4.2	-3.3	19	4.2	-1.4	-4.0	351	2.0	0.3	-2.0	255	2.7	2.6	0.7	254	12.0	11.5	3.4	235	16.7	13.6	9.7	241	6.0	5.3	2.9			
6	55	5.5	-4.5	-3.2	27	5.1	-2.3	-4.5	14	2.1	-0.5	-2.0	301	4.1	3.5	-2.1	258	10.9	10.7	2.3	235	17.1	13.9	9.9	213	4.2	2.3	3.5			
7	52	4.9	-3.9	-3.0	11	5.2	-1.0	-5.1	11	3.1	-0.6	-3.0	309	2.7	2.1	-1.7	264	10.3	10.3	1.0	231	13.4	10.4	8.4	232	5.5	4.3	3.4			
8	41	4.1	-2.7	-3.1	15	5.0	-1.3	-4.8	357	2.0	0.1	-2.0	286	2.9	2.8	-0.8	262	12.3	12.2	1.7	237	14.3	12.0	7.8	251	6.8	6.4	2.2			
9	49	4.6	-3.5	-3.0	19	5.0	-1.6	-4.7	301	1.2	1.0	-0.6	266	5.3	5.3	0.4	256	12.2	11.8	2.9	244	15.7	14.1	7.0	250	4.5	4.2	1.5			
10	42	4.3	-2.9	-3.2	19	4.3	-1.4	-4.1	342	1.9	0.6	-1.8	282	5.5	5.4	-1.1	259	13.0	12.8	2.5	236	14.3	11.9	7.9	185	5.3	0.5	5.3			
11	50	4.2	-3.2	-2.7	21	4.0	-1.4	-3.7	331	1.0	0.5	-0.9	290	4.4	4.1	-1.5	257	10.7	10.4	2.4	239	15.0	12.9	7.6	174	3.0	-0.3	3.0			
12	56	3.7	-3.1	-2.1	16	3.2	-0.9	-3.1	332	2.6	1.2	-2.3	283	5.2	5.1	-1.2	257	12.6	12.3	2.9	245	18.6	16.9	7.8	234	5.9	4.8	3.5			
13	51	3.6	-2.8	-2.3	9	3.3	-0.5	-3.3	324	2.7	1.6	-2.2	276	5.7	5.7	-0.6	267	13.3	13.3	0.6	244	17.8	16.1	7.7	238	5.1	4.3	2.7			
14	37	3.1	-1.9	-2.5	10	4.0	-0.7	-3.9	343	2.1	0.6	-2.0	272	6.9	6.9	-0.2	251	15.0	14.2	4.9	247	18.3	16.8	7.2	266	7.7	7.7	0.5			
15	52	3.7	-2.9	-2.3	17	4.2	-1.2	-4.0	308	1.1	0.9	-0.7	283	7.0	6.8	-1.6	260	16.6	16.3	3.0	250	19.5	18.3	6.6	248	10.2	9.5	3.8			
16	54	5.2	-4.2	-3.0	19	3.9	-1.3	-3.7	331	2.1	1.0	-1.8	284	5.3	5.1	-1.3	266	15.6	15.6	1.2	253	18.9	18.1	5.4	254	6.5	6.2	1.8			
17	54	5.2	-4.2	-3.0	18	4.3	-1.3	-4.1	357	3.6	0.2	-3.6	277	7.5	7.4	-0.9	264	19.4	19.3	1.9	242	24.4	21.5	11.5	247	8.2	7.5	3.2			
18	53	3.6	-2.9	-2.2	19	4.3	-1.4	-4.1	335	2.9	1.2	-2.6	290	7.7	7.2	-2.6	272	17.3	17.3	-0.5	250	20.1	18.9	6.9	273	9.3	9.3	-0.5			
19	45	3.8	-2.7	-2.7	24	4.6	-1.9	-4.2	346	3.7	0.9	-3.6	280	6.8	6.7	-1.2	267	16.9	16.9	1.0	246	20.9	19.1	8.6	259	8.3	8.1	1.6			
20	52	4.1	-3.2	-2.5	18	3.8	-1.2	-3.6	350	2.3	0.4	-2.3	283	6.6	6.4	-1.5	257	16.7	16.3	3.8	243	19.4	17.2	8.9	277	8.5	8.4	-1.0			
21	53	3.5	-2.8	-2.1	19	4.9	-1.6	-4.6	334	3.0	1.3	-2.7	280	6.6	6.5	-1.1	265	14.8	14.7	1.3	253	17.3	16.5	5.2	255	6.0	5.8	1.5			
22	49	3.2	-2.4	-2.1	13	4.1	-0.9	-4.0	337	2.8	1.1	-2.6	280	6.4	6.3	-1.1	258	15.8	15.5	3.3	245	18.8	17.1	7.9	270	8.9	8.9	0.0			
23	59	3.5	-3.0	-1.8	13	3.9	-0.9	-3.8	322	2.8	1.7	-2.2	271	7.9	7.9	-0.1	260	18.8	18.5	3.4	246	24.7	22.5	10.1	272	12.5	12.5	-0.5			
24	65	2.9	-2.6	-1.2	16	3.3	-0.9	-3.2	302	2.6	2.2	-1.4	272	8.3	8.3	-0.3	261	19.5	19.3	2.9	248	25.3	23.5	9.3	253	9.8	9.4	2.9			
25	50	3.1	-2.4	-2.0	9	3.6	-0.6	-3.6	304	2.2	1.8	-1.2	276	8.4	8.4	-0.9	255	19.9	19.3	5.0	244	21.1	19.0	9.2	259	12.6	12.3	2.5			
26	52	5.6	-4.4	-3.4	18	4.4	-1.4	-4.2	330	2.0	1.0	-1.7	268	7.9	7.9	0.3	261	19.7	19.4	3.2	253	21.7	20.7	6.5	261	7.8	7.7	1.2			
27	60	6.0	-5.2	-3.0	43	4.0	-2.7	-2.9	313	1.6	1.2	-1.1	270	6.4	6.4	0.0	263	17.7	17.6	2.2	255	19.7	19.0	5.1	271	7.6	7.6	-0.1			
28	69	4.4	-4.1	-1.6	14	3.6	-0.9	-3.5	289	2.8	2.6	-0.9	278	6.9	6.8	-1.0	262	16.5	16.3	2.4	255	19.4	18.7	5.1	278	5.2	5.2	-0.7			
29	59	4.1	-3.5	-2.1	10	3.9	-0.7	-3.8	311	3.5	2.6	-2.3	274	8.5	8.5	-0.6	273	19.6	19.6	-1.0	254	18.9	18.1	5.3	244	6.4	5.8	2.8			
30	69	3.0	-2.8	-1.1	341	3.7	1.2	-3.5	303	4.5	3.8	-2.5	277	10.9	10.8	-1.3	274	19.2	19.2	-1.2	251	20.6	19.4	6.8	264	5.7	5.7	0.6			
31	60	4.0	-3.5	-2.0	360	3.6	0.0	-3.6	309	4.3	3.3	-2.7	276	9.0	9.0	-0.9	273	19.4	19.4	-1.1	259	21.0	20.6	4.0	260	8.3	8.2	1.4			



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